

## ADDENDUM NO. 1, September 30, 2020 *(Revised October 1, 2020)*

RE: POK-DIP 151C  
Project No. 2190380.01

FROM: **Mackenzie**  
The Hudson Building  
101 E 6<sup>th</sup> Street, #200  
Vancouver, WA 98660  
(360) 695-7879

TO: Prospective Bidders

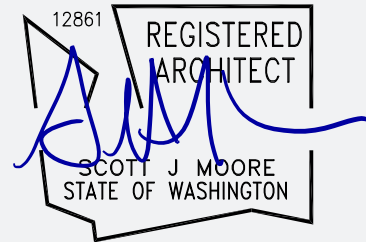
ADDENDUM NO. 1 amends the contract documents for the subject project, dated September 14, 2020. It is the responsibility of the prospective bidders to note the contents of this addendum and notify the Owner that this addendum has been received. Acknowledge receipt by inserting the number of this addendum in the space provided on the Bid Proposal Form.

The following changes in the contract documents constitute this addendum. All changes by addenda are to be included in the proposal form and the contents of the addenda become a part of the Contract Documents for this project. All changes offset only the specified drawings, words, or paragraphs mentioned. The balance of the drawings and specifications will remain in full force.

This addendum includes the following:

- Professional Stamps and Signatures
- Questions from Contractors
- Changes to Specifications
- Product Substitutions
- Changes to Drawings

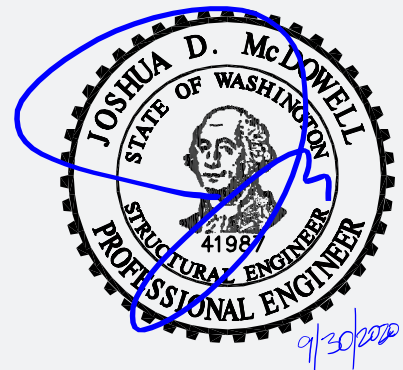
The following changes to Architectural Drawings, denoted by an 'A' (e.g. 1/A5.10) and related specification revisions have been prepared or reviewed under direct supervision of the Architect of Record.



The following changes to Civil Drawings, denoted by a 'C' (e.g. 1/C5.10), and related specification revisions have been prepared or reviewed under direct supervision of the Civil Engineer of Record.



The following changes to Structural Drawings, denoted by an 'S' (e.g. 1/S5.10), and related specification revisions have been prepared or reviewed under direct supervision of the Engineer of Record.



## QUESTIONS FROM CONTRACTORS

1. Is there an Engineers Estimate or general cost range?
  - A. \$520,000 to \$550,000
2. Is MEP design Build?
  - A. Yes, mechanical, electrical, and plumbing will be provided as design build by the general contractor.
3. Bid Document Section 31 05 16 paragraph 3.1.A talks about boulder piles; assume this is not part of this project?
  - A. Correct, see changes to specifications below.
4. Is there a Right of Way permit required in addition to the site permits currently in review?
  - A. No right of way permit is required, work in ROW is part of site permit currently under review.
5. Are gas and fiber required and where are they located?
  - A. Yes, they are required and would be provided and coordinated with utility company's by GC. See revised drawings for gas meter location.
6. Will the CMU alternate increase the foundation size?
  - A. Yes, CMU base alternate will be reviewed based on material cost and if accepted would be provided to structural engineer for review and revision of the foundation plan.
7. Is the Roof a Class A rating?
  - A. Section 07 54 00 does not apply to this project.
8. Is the building conditioned?
  - A. The building will be provided with freeze protection heating only to meet Washington Energy Code.
9. Are the Canopies 4 ft deep?
  - A. Yes, canopies are 4 ft deep.
10. Are the canopies to be galvanized?
  - A. Yes, canopies to be galvanized.
11. Does the Port want interior liner panels at Base?
  - A. Not at this time, to be installed with future tenant improvements if required.

12. What is the slab thickness of the existing building onsite?
  - A. 6" reinforced slab with thickened edges.
13. Does any excess soil need to be exported?
  - A. Yes, all excess soil to be exported onto adjacent Port owned Lot (Lot 1).
14. Can the power pole next to the existing building be used for temp power at job trailer/site?
  - A. Yes.
15. Can we bring subcontractors onsite after this meeting?
  - A. Yes, contact the Port directly for access to site.
16. Bid document section 00 21 13 paragraph 1.15.A asks for work by general contractor to be primary contractor and equipment installer for a minimum of 45% of this contract, is this required?
  - A. No, see changes to specifications below.
17. Section 01 20 00 is missing according to the specification index, is this section needed?
  - A. See changes to specifications below and attached section 01 20 00.
18. Can you provide clarification on Bid form in section 00 41 13?
  - A. Bid Form provided in section 00 41 13 has been revised to provide total base bid with sales tax for Bond amount. This Bid amount will be broken down between specification sections within bid form provided in section 00 43 22. See changes to specifications below.
19. Alternates form is missing from section 01 23 00 paragraph 2.02.B, can you provide?
  - A. GC to provide their own Alternates form to be submitted with the bid forms. See changes to specifications below referencing this bid document.
20. Should the GC provide their own value engineering form requested in section 01 23 00 paragraph 2.05A?
  - A. Yes, GC to provide their own VE form.
21. Specifications include section 07 54 00, does this apply to this project?
  - A. No, roof to be standing seam by PEMB.
22. Sections 10 28 00, 10 44 00, 12 21 13, and Division 21 are missing from the Unit Pricing document in Bid Document Section 00 43 22?
  - A. See updated bid document 00 43 22.



23. Specification section 08 36 13 paragraph 2.01 refers to 418 series doors which is an 18-gage door. Paragraph 2.02 refers to a 20-gage door, what gage of garage door should be bid?
- A. 18 gage doors are intended, follow series 418 door standards.
24. Please confirm the warranty/guarantee term is the standard 1 year?
- A. Yes, general contractors warranty/guarantee term to be standard 1 year. See specifications for other manufacturers warranty info as it relates to specific materials/products.
25. Sheet S0.00 Design Criteria has 35 PSF listed for the sloped roof snow load, and the PEMB section has roof snow as 25 PSF, which is correct?
- A. 35 PSF is correct.
26. Sheet S1.10 detail 2, there is a dimension of 1'-6" Min below finished grade. Is this supposed to be 2'-6" for a total of 3 ft thickened edge?
- A. The 1'-6" min dimension is to ensure the bottom of footing is below the frost depth. Based on the assumed loading criteria, the footing dimensions shown within detail 2/S1.10 are sufficient; however, this footing depth may be increased as required based on site conditions.
27. Section 13 34 19 paragraph 2.07.A minimum 0.03-inch metal thickness. Nucor offers 24 gage with a thickness of 0.0222-inch, or 26 gage with a thickness of 0.0177-inch. Is either of these acceptable in lieu of the 0.03 inch specified?
- A. 24 gage is acceptable.
28. Does the building need to have a fire sprinkler system? G1.10 Code analysis calls out an ESFR sprinkler system with pump provided throughout and high piled storage, but the chart to the right of it says no fire sprinkler system is required?
- A. No sprinkler system is required, see revised G1.10.
29. Is there a specification for the alternate CMU wainscot?
- A. See sections 04 05 11 and 04 20 00 attached.
30. Drawing S0.00 "Pre-Engineered Metal Building (by Others). Item 2 shows a 'collateral' load of 5 PSF, please verify what is to be included with this collateral load?
- A. This is intended to be a misc. dead load in addition to roof DL.
31. Drawing S0.00 "Pre-Engineered Metal Building (by others). There is no "thermal factor" listed, please verify what the thermal factor is to be?
- A. Thermal factor,  $C_t = 1.1$

32. Drawing S0.21 details, 2&3, "parallel to flutes" and "perpendicular to flutes" - Where is this partition wall located for these details?
- A. Refer to A1.10 for location and extent of interior walls.
33. Drawing S0.22 detail 1 - Where does this apply on the drawings?
- A. These are typical details that may or may not be required on this project. Refer to Arch for interior wall locations.
34. Drawing S0.22 detail 11 & 12. Both have a note to reference detail 17/S.20. - This detail does not exist on drawing S0.20, please verify.
- A. Detail reference 17/S0.20 should be updated to 1/S0.22.
35. Drawing A0.01 Architectural General Notes, Note B says to provide 18'-0" clear for all mechanical ducts, lighting, and sprinklers. Are there any mechanical units hanging from the building structure?
- A. Yes, for freeze protection assumed to be provide by gas fired unit heaters to be supported from structure.
36. Drawing A0.01 Architectural General Notes, Note U see code summary drawings for floor plans for scope of fire rated walls, please verify where this drawing is located in addition to the fire rated walls.
- A. The note is directing you to G1.10 Code Summary. There are however no fire rated walls and this note has been removed from Sheet A0.01.
37. Drawing A0.01 Architectural General Notes, Note Z is this in reference to the two canopies shown on A1.10 and A2.10 (south elevation)?
- A. Yes
38. Drawing A0.01 Architectural General Notes, Note Y please provide details along with the total PSF for the furring of all exterior walls withing the office, etc.
- A. Office areas will be provided at future tenant improvement, furring at toilet room only, see detail 3/A5.20. Note Y from A0.01 has been removed.
39. Drawing A2.10, please verify the bottom elevation of these two canopies is 110 ft AFF.
- A. Confirmed, see revised A2.10.
40. Drawing A2.10, please verify the elevation (from finish floor 100'-0") of the metal panel wainscot.
- A. Wainscot to be at 107'-0" above finished floor. See revised A2.10
41. Drawing A2.10A, please verify the elevation and PSF of the alternate CMU Wainscot.

- A. CMU Wainscot to 106'-8" (6'-8") above finished floor. Additional information is required to provide wainscot loading criteria. But as a preliminary number, assuming 81psf CMU Dead Load, the out-of-plane seismic load for the CMU wainscot would be 16psf.
42. Specification section 13 34 19 paragraph 2.06.C, please verify that there is no skylight framing required as there are none shown on the drawing elevations.
- A. Confirmed no skylight framing required, see changes in specifications below.
43. Per specification section 00 41 13 and 00 43 22 combined with alternates, what form are we supposed to submit with our bid?
- A. Both bid forms to be submitted.
44. There doesn't appear to specific alternate pricing per 00 41 13 and was wondering what the intent was for this?
- A. Bid Form adjusted removing additive and deductive items. Separate alternates form to be submitted (GC standard alternate format).
45. Drawing A4.10, enlarged office plan shows detail 7/A5.20 but this detail does not exist on A5.20, please verify.
- A. Detail callout removed.
46. Drawing A4.10, keynote 16, where is this applicable?
- A. Keynote removed, ACT to be provided with future tenant improvements.
47. Detail 2/A5.20 and 3/A5.20 contradict ceiling heights, please verify?
- A. Toilet room gypsum board ceiling to be at 9'-0" AFF. Detail 2/A5.20 has been revised.
48. Sheet A4.10 and A6.10 calls out carpet tile in future offices. Does this happen with future TI work?
- A. Yes, carpet to be provided at future TI.
49. Sheet vinyl flooring and rubber base, can you provide specifications for these and do you want to include a line in the unit price form for them?
- A. Yes, specification section 09 65 00 for sheet vinyl and rubber base information. See updated Bid form 00 43 22.
50. Is it the intent that the GC will get reaction calculations from the metal building manufacturer and then Mackenzie will review and if needed, update the structural details to finalize the foundation design and how we anchor to the concrete slab, is that correct?

- A. Yes, that is the general process. Mackenzie will review the reactions from the PEMB manufacturer to ensure the slab design will accommodate the actual loads. If the loads are higher than anticipated, then we would revise our details accordingly.
51. Please confirm the classification of the roofing system per 07 54 00 2.02.
- A. Section 07 54 00 does not apply, see changes to specifications below
52. Specifications section 09 90 00 paragraph 2.03 call out exterior paint spec (number of coats, etc..) but does not specify interior?
- A. See changes to specifications below.
53. Assume (1) FEC at this time that is mounted to steel column flange in warehouse as future front offices are not in this scope? Note: 1 FEC per 6,000 SF.
- A. Provide fire extinguishers per G1.10 to best meet max travel.
54. Specifications call out for Levelor blinds. Is this in our scope at the storefront systems?
- A. No, specification section 09 65 00 removed, see changes to specifications below.
55. No footings are called out in the plans but rather a thickened slab edge to carry building columns. Please confirm no additional footings are required. Building excavation may start prior to final building design.
- A. No additional footings required at this time. Mackenzie will review the reactions from the PEMB manufacturer to ensure the slab design will accommodate the actual loads. If the loads are higher than anticipated, then we would revise our details accordingly.
56. In regard to liquidated damages, there was no mention of delays due to weather that the GC cannot control. Has your schedule considered weather delays?
- A. Minimal weather delays have been considered. GC to provide anticipated schedule with weather delays noted for consideration by Port. The Port understands there will be weather delays and will expect these to be within reason with assumptions noted by GC with bid.
57. In regard to sprinkler systems, after site walk and reference G1.10 Building protection systems, no sprinkler systems have been required. Future occupancies may dictate a fire sprinkler system and considerations for collateral loads of building design appear to have been accounted for with a 5# specification, is this correct? Please confirm the GC is not to quote a fire sprinkler system currently?
- A. Correct, minimal additional loading has been included for possible future needs. Correct GC should not provide a quote for a fire sprinkler system at this time.
58. We understand topsoil for planting area is by GC, plant and placement is by owner. Please confirm Bio Swale plants and placement is by GC? Please confirm if irrigation system is by GC?

- A. Confirmed, bioswale planting by GC, see revised landscape sheets. Confirmed irrigation system design build by GC.
59. Sheet A6.10 plumbing note C references underground sewer/plumbing for four future single occupant toilet rooms. 1/A1.10 keynote 12 shows one location. Please confirm you want 4 future and clarify locations.
- A. See sheet A4.10, three locations needed, two current toilet rooms, one future toilet room, and janitor sink to be accounted for.
60. Confirm that GC permit submittal documents and fees are only related to deferred submittals, all other fees and permits are by owner.
- A. Confirmed, deferred submittal permits and fees by GC.
61. Bid package calls for 8"x8" gutter. Industry standard gutters are 6", downspouts are 4"x5". Please confirm this is acceptable.
- A. Yes, see revised Sheets A1.10, A2.10, and A2.10A.
62. Is the removal of the existing building part of the GC scope of work?
- A. Please provide a add alternate for this removal as shown on revised C1.00.

## CHANGES TO SPECIFICATIONS

1. Revise section 00 21 13 paragraph 1.15A to read 'Each bidder must submit a statement of work experience, general ability to perform the work under this contract, and equipment available to perform this work. The bidder will be required to be the primary contractor **and work directly with subcontractors and design builders.**'
2. See attached revised Bid Form 00 41 13 attached.
3. See attached revised Bid Form 00 43 22 attached.
4. Add section 01 20 00 Price and Payment Procedures, see attached.
5. Delete section 01 23 00 paragraph 2.02.B; Document 00 43 23 – Alternates Form: List of alternatives as supplement to Bid Form.
6. Add section 01 23 00 paragraph 2.04.C; alternative No. Three – Landscape Mulch: 1. Base Bid: Provide topsoil as noted in plans for owner provided and installed planting. 2. Alternative item: Provide Mulch at all landscape areas per plan.
7. Revise section 01 25 00 paragraph 1.02.A to read 'Section 01 20 00 – Price and Payment Procedures.'
8. Add section 04 05 11 Mortar and Masonry Grout, see attached.

9. Add section 04 20 00 Unit Masonry, see attached.
10. Delete section 07 54 00 Membrane Roofing.
11. Revise section 08 36 13 paragraph 2.02.B to read 'Door Panels: Flush steel construction; **18** gage outer steel sheet....'
12. Add section 09 65 00 Resilient Flooring, see attached.
13. Add section 09 90 00 paragraph 2.04 Paint Systems – Interior
  - 2.04 A. Ferrous Metals, Unprimed, Latex, 3 Coat:
    - 1) One coat latex primer as recommended by MFR
    - 2) Semi-Gloss: Two coats of latex enamel
  - 2.04 B. Ferrous Metals, Primed, latex, 2 Coat:
    - 1) Semi-gloss: Two coats of latex enamel
  - 2.04 C. Gypsum Board/Plaster, Latex-Acrylic, 3 Coat:
    - 1) One coat of latex primer sealer.
    - 2) Semi-Gloss: Two coats of latex-acrylic enamel; Toilet room walls.
    - 3) Satin: Two coats 100% latex-acrylic; Vertical Surfaces.
    - 4) Flat: Two coats of 100% latex enamel-acrylic; Ceilings.
14. Revised Section 10 44 00 paragraph 2.02 A.1 to 'Provide wall/column mounted fire extinguishers in warehouse areas per plan. Provide unit pricing for extinguishers by type.'
15. Delete section 10 44 00 paragraph 2.03 Fire Extinguisher Cabinets.
16. Delete section 12 21 13 Horizontal Louver Blinds.
17. Revise section 13 34 19 paragraph 2.07.A to read 'Siding: Minimum **0.0222-inch** metal thickness....'
18. Delete section 13 34 19 paragraph 2.06.C. Provide framing for skylight openings.
19. Delete sections 31 05 16, 31 22 13, and 31 23 16.
20. Revise Sections 31 05 13 and 31 10 00, see attached.

## PRODUCT SUBSTITUTIONS

The following product substitutions have been reviewed and approved:

| <u>DIVISION</u> | <u>PRODUCT</u>                               |
|-----------------|----------------------------------------------|
| 1. 13 49 19     | Pacific Building Systems (PEMB manufacturer) |

## **CHANGES TO DRAWINGS**

1. See attached change log and drawings referenced therein.

Section 00 41 13 – **BID FORM**

The undersigned Bidder hereby declares that s/he has read the Invitation to Bid and the plans, specifications, and drawings provided, understands the conditions described therein, and has determined all situations affecting the goods and services it is bidding upon.

The undersigned Bidder proposes and agrees, if its bid is accepted, to provide all goods and services, at his/her own expense, according to the plans, specifications, contract, and the instructions of the Port of Klickitat, to furnish the goods and services within the time stated, and to complete the work for the following prices:

This work under the contract shall be fully completed by the date of completion declared in this proposal for the total bid amount of:

Total Base Bid:

\_\_\_\_\_ Dollars (\$\_\_\_\_\_)

State Sales Tax: The above bid does not include state or local retail sales tax.

Estimated WA State Sales Tax Due on Total Bid (at current rate of 7%):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Dollars (\$\_\_\_\_\_)

The work under this Contract shall be fully completed no later than **March 31, 2021** for the total bid amount stated above. Time is of the essence in completing this project on or before the stated completion time and will be an important consideration in the final award of this contract.

Please also find herewith enclosed with this proposal our deposit in the form of a certified check, cashier's check or bid bond for the amount of \$ \_\_\_\_\_, which is not less than five percent (5%) of the combined total or lump sum of this bid.

\_\_\_\_\_  
NAME OF BIDDER (Firm)

\_\_\_\_\_  
SIGNATURE OF AUTHORIZED OFFICIAL

\_\_\_\_\_  
PHYSICAL ADDRESS

\_\_\_\_\_  
AUTHORIZED OFFICIAL (PRINT)

\_\_\_\_\_  
CITY / STATE / ZIP CODE

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
TELEPHONE NO.

\_\_\_\_\_  
DATE OF SUBMITTAL

\_\_\_\_\_  
FAX NO.

\_\_\_\_\_  
BUSINESS LICENSE NO. AND EXPIRATION DATE

Notes:

1. If bidder is a partnership or a d/b/a, so state, giving firm name under which business is transacted.
2. If bidder is a corporation, this proposal must be executed by its duly authorized officials.



3. If bidder is a joint venture, so state, giving both firm names under which business is transacted.
5. The Port reserves the right to adjust the scope of this work to match the available funding.

**Addendum Acknowledgment**

The bidder hereby acknowledges receipt of the following numbered addenda to the specifications and/or plans. (Failure to acknowledge receipt of addenda, as applicable, may be considered as a serious irregularity in this proposal and a basis for rejecting the proposal.)

| <u>ADDENDUM NO.</u> | <u>DATE OF RECEIPT</u> | <u>ACKNOWLEDGMENT</u> |
|---------------------|------------------------|-----------------------|
| _____               | _____                  | _____<br>(Signature)  |
| _____               | _____                  | _____<br>(Signature)  |
| _____               | _____                  | _____<br>(Signature)  |

**Surety**

If the bidder is awarded the Contract, the surety or sureties who will provide the bonds for the faithful performance of the Contract and for the payment for all materials, labor and taxes, will be as follows:

| <u>SURETY</u> | <u>ADDRESS</u> |
|---------------|----------------|
| 1. _____      | _____          |
| 2. _____      | _____          |

End of Section 00 41 13

## Section 00 43 22 – UNIT PRICES

The undersigned bidder proposes and agrees, if its bid is accepted, to furnish the goods and services for the following prices:

### BASE BID

| Item No.                                   | Spec Section  | Item Description                       | Amount \$/¢ | Subcontractor/Supplier |
|--------------------------------------------|---------------|----------------------------------------|-------------|------------------------|
| 1                                          | Div 00 and 01 | General Requirements                   |             |                        |
| 2                                          | Div 03        | Concrete slab and foundation           |             |                        |
| 3                                          | Div 06        | Rough Carpentry                        |             |                        |
| 4                                          | 07 90 05      | Joint Sealers                          |             |                        |
| 5                                          | 08 11 13      | Hollow Metal Doors and Frames          |             |                        |
| 6                                          | 08 14 16      | Flush Wood Doors (Interior)            |             |                        |
| 7                                          | 08 36 13      | Overhead Sectional Doors               |             |                        |
| 8                                          | 08 43 13      | Metal Framed Entrances and Storefronts |             |                        |
| 9                                          | 08 71 00      | Door Hardware                          |             |                        |
| 10                                         | 08 80 00      | Glazing                                |             |                        |
| 11                                         | 09 21 16      | Gypsum Board Assemblies                |             |                        |
| 12                                         | 09 22 16      | Non Structural Metal Framing           |             |                        |
| 13                                         | 09 65 00      | Resilient Flooring                     |             |                        |
| 14                                         | 09 90 00      | Painting and Coating                   |             |                        |
| 15                                         | 10 28 00      | Toilet Accessories                     |             |                        |
| 16                                         | 10 44 00      | Fire Protection Specialties            |             |                        |
| 17                                         | Div 13        | Metal Building Systems                 |             |                        |
| 18                                         | Div 21        | Fire Protection                        |             |                        |
| 19                                         | Div 22        | Plumbing (Design Build)                |             |                        |
| 20                                         | Div 23        | HVAC (Design Build)                    |             |                        |
| 21                                         | Div 26        | Electrical (Design Build)              |             |                        |
| 22                                         | Div 31        | Earthwork                              |             |                        |
| 23                                         | 32 13 13      | Site Concrete                          |             |                        |
| 24                                         | 32 17 13      | Parking Bumpers                        |             |                        |
| 25                                         | 32 17 23.13   | Painted Pavement Markings              |             |                        |
| 26                                         | 32 84 23      | Design Build Irrigation                |             |                        |
| 27                                         | 32 93 00      | Plants                                 |             |                        |
| 28                                         | 33 05 13      | Manholes and Structures                |             |                        |
| 29                                         | 33 11 16      | Site Water Utility Distribution Piping |             |                        |
| 30                                         | 33 31 11      | Site Sanitary Utility Sewerage Piping  |             |                        |
| 31                                         | 33 41 11      | Site Storm Utility Drainage Piping     |             |                        |
| <b>Subtotal (Before State Sales Tax) =</b> |               |                                        | <b>\$</b>   |                        |
| State Sales Tax =                          |               |                                        | \$          |                        |
| Bond                                       |               |                                        | \$          |                        |
| Contractor's Fee and Insurance             |               |                                        | \$          |                        |
| <b>Total Cost to Port of Klickitat =</b>   |               |                                        | <b>\$</b>   |                        |

Total Cost in Words:

NAME OF BIDDER (Firm)

SIGNATURE OF AUTHORIZED OFFICIAL

PHYSICAL ADDRESS

AUTHORIZED OFFICIAL (PRINT)

CITY / STATE / ZIP CODE

TITLE

TELEPHONE NO.

DATE OF SUBMITTAL

End of Section 00 43 22

## **DIVISION 31 – EARTHWORK**

Section 31 05 13 –

### **EARTHWORK**

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#### **1 GENERAL**

##### **1.1 Summary**

###### **1.1.A Section Includes:**

- 1.1.A.1 Unclassified materials.
- 1.1.A.2 Select soil materials.

###### **1.1.B Related Sections:**

- 1.1.B.1 Section 31 10 00 Site Preparation

##### **1.2 References**

###### **1.2.A ASTM International:**

- 1.2.A.1 ASTM D698 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft<sup>3</sup>).
- 1.2.A.2 ASTM D2487 - Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System).

##### **1.3 Quality Assurance**

- 1.3.A.1 The owner will engage a Geotechnical Engineer as the owners on-site representative for quality control and observation of earthwork. The owner will notify the Contractor of the person or organization that is to serve as Geotechnical Engineer.
- 1.3.A.2 The Geotechnical Engineer will evaluate materials proposed for use as fill and backfill, make and/or review appropriate tests, evaluate compaction of in-place fill and backfill, and designate for removal of identified unsuitable materials.
- 1.3.A.3 In-place field density tests will be made by the Geotechnical Engineer to determine the adequacy of compaction of fill and backfill materials. Tests will be performed as deemed necessary to determine the adequacy of compaction. Other evaluations methods include proof rolling with heavy construction equipment as deemed necessary with the Geotechnical Engineer. Cooperate with such testing by the Geotechnical Engineer.
- 1.3.A.4 Do not cover site improvements with backfill materials prior to required evaluations, tests, and approvals. Backfill materials covering unevaluated, untested, and rejected site improvements shall be removed and replaced at the Contractor's sole expense.
- 1.3.A.5 Unfavorable Weather Conditions: Do not place, spread, or roll fill material during unfavorable weather conditions. Do not resume operations until existing subgrade and fill meet the requirements of Parts 3.2 and 3.4 of this Section to the satisfaction of the Geotechnical Engineer.

##### **1.4 Site Conditions**

- 1.4.A.1 The geotechnical engineering report for this project is available upon request. This information does not necessarily reflect soil types, strata thickness, or water level variations that may exist between explorations and should not be construed as warranty of the subsurface conditions. Neither the Owner, Architect, nor the Geotechnical Engineer will be responsible for interpretations or conclusions drawn therefrom by the Contractor.
- 1.4.A.2 Additional explorations may be performed by the Contractor at no additional cost to the Owner, provided such explorations are acceptable and approved in writing by the Owner.

## **2 PRODUCTS**

## 2.1 Imported Structural Fill:

1. Imported structural fill shall be well-graded pit- or quarry-run rock, crushed rock, crushed gravel, or sand and free of clay balls, roots, organic matter, and other deleterious materials.
2. Imported structural fill shall have a maximum particle size of 6 inches. Particles larger than 6 inches should be removed prior to placement.
3. Imported structural fill placed during periods of dry weather shall have less than 12 percent by dry weight passing the U.S. Standard No. 200 Sieve when tested in accordance with ASTM C 117. Imported structural fill placed during periods of wet weather shall have less than 5 percent by dry weight passing the U.S. Standard No. 200 Sieve (wet sieve method).
4. All imported material must come from a source that is pre-approved by the Owner or their geotechnical engineer for this project.

### B. Select Structural Fill:

1. Select structural fill shall be on-site or imported silty materials that are free of deleterious materials and particles greater than 4 inches in diameter. All select structural fill shall be approved by the Geotechnical Engineer prior to use as structural fill material.
2. Moisture condition on-site materials to reduce the moisture content as required to achieve adequate compaction.
3. All imported material must come from a source that is pre-approved by the Owner or their geotechnical engineer for this project.

### C. Trench Stabilization Material:

1. Trench stabilization material shall be ¼-inch to 4-inch, well-graded crushed rock or crushed gravel free of deleterious materials.
2. Material shall be less than 5 percent by dry weight passing the U.S. Standard No. 200 Sieve when tested in accordance with ASTM C 117.
3. All imported material must come from a source that is pre-approved by the Owner or their geotechnical engineer for this project.

### D. Imported Granular Material:

1. Imported granular material shall be 1½-inch- or ¾-inch-minus crushed rock or crushed gravel and sand meeting the requirements provided in WSS 9-03.9(1) – Ballast, WSS 9-03.14(1) – Gravel Borrow, or WSS 9-03.14(2) – Select Borrow.
2. Material shall be less than 5 percent by dry weight passing the U.S. Standard No. 200 Sieve when tested in accordance with ASTM C 117.
3. All imported material must come from a source that is pre-approved by the Owner or their geotechnical engineer for this project.

### E. Stabilization Material:

1. Imported granular material shall be 6-inch-minus, pit- or quarry-run rock, crushed rock free of clay balls, roots, organic matter, and other deleterious materials.
2. Imported granular material shall have less than 5 percent by dry weight passing the U.S. Standard No. 200 Sieve when tested in accordance with ASTM C 117.
3. All imported material must come from a source that is pre-approved by the Owner or their geotechnical engineer for this project.

### F. Imported Granular Material for Pipe Bedding and Pipe Zone:

1. Pipe bedding and pipe zone for concrete and ductile iron pipe shall be as specified for imported granular material, ¾-inch-minus size, with the exception that the percent passing the U.S. Standard No. 200 Sieve shall be less than 8 percent by dry weight when tested in accordance with ASTM C 117.
2. Pipe bedding and pipe zone for copper pipe and electrical conduit shall be ¼-inch-minus imported granular material.
3. All imported material must come from a source that is pre-approved by the Owner or their geotechnical engineer for this project.

G. Drain Rock:

1. Drain rock shall be crushed rock or gravel conforming to the following gradation:

| <u>U.S. Standard Sieve Size</u> | <u>Percent Passing (by dry weight)</u> |
|---------------------------------|----------------------------------------|
| 1½-inch                         | 100                                    |
| 1 inch                          | 95-100                                 |
| ½ inch                          | 25-60                                  |
| No. 4                           | 0-10                                   |
| No. 8                           | 0-5                                    |

2. All imported material must come from a source that is pre-approved by the Owner or their geotechnical engineer for this project.

H. On-Site Topsoil

1. Stockpile existing topsoil on site at locations designated by Owner for use in landscape areas. This stockpiled topsoil shall be free of particles greater than 1 inch in diameter, admixtures of subsoil, clay, noxious weeds and grasses (such as: Horsetail, Quackgrass, Johnson grass, and their roots), and other material deleterious to plant growth or that hinder grading, planting or maintenance operations. Protect stockpiled topsoil from erosion and do not move in a frozen or saturated condition.

I. Imported Topsoil

1. Imported topsoil shall consist of sandy-loam from approved sources and shall be free of particles greater than 1 inch in diameter and admixtures of subsoil, clay, noxious weeds and grasses (such as: Horsetail, Quackgrass, Johnson grass, and their roots), and other material deleterious to plant growth or that hinder grading, planting, or maintenance operations. Imported topsoil shall not be delivered in a frozen or muddy condition. Protect from erosion at all times during transport, stockpiling, and placement.
2. All imported material must come from a source that is pre-approved by the Owner or their geotechnical engineer for this project.

## 2.2 Source Quality Control

- 2.2.A When visual inspection by the Architect/Engineer indicates that materials do not meet specified requirements, change material and retest.

## 2.3 Compaction and Moisture Control Equipment

- A. Operate compaction equipment in strict accordance with the manufacturer's instructions and recommendations. Maintain equipment in such a condition that it will deliver the manufacturer's rated compactive effort. Provide larger and/or different types of additional

equipment if required to obtain adequate compaction. Hand-operated equipment shall be capable of achieving the specified compaction.

- B. Equipment for applying water shall be of a type and quality adequate for the Work, shall not leak, and shall be equipped with a distributor bar or other device to assure uniform application. Equipment for mixing and drying materials shall consist of blades, discs, or other equipment adequate to provide thorough mixing or drying of materials.

## **PART 3 EXECUTION**

### **3.1 EXCAVATION**

- A. Excavation: Excavation consists of removal and transport of material encountered. All excavation is unclassified.
  - 1. Excavate to depth, lines, and grades as shown on the Drawings or as otherwise specified.
  - 2. Excavate as required to support all foundation elements on native soils.
  - 3. Protect subgrade soils from disturbance during all excavation activities.
  - 4. Remove organic soils as directed by the Geotechnical Engineering Report.
  - 5. Improve agricultural till as described in Section 31 10 00, Site Preparation and 31 32 14, Cement Treated Structural Fill.
  - 6. Allow Geotechnical Engineer to evaluate soil removal. Excavate unsuitable areas and repair as directed by Geotechnical Engineer.
  - 7. Notify the Geotechnical Engineer when excavation has reached required subgrade elevations.
  - 8. If unsuitable bearing materials are encountered at the required subgrade elevations, carry excavations deeper and replace the excavated material as directed by the Geotechnical Engineer.
  - 9. Proof roll the subgrade with a fully loaded 10-yard dump truck or equivalent in the presence of the Geotechnical Engineer to identify soft or loose zones. If construction occurs during the wet season or if the ground surface remains wet, the subgrade should be evaluated by a qualified geotechnical engineer by probing with a steel rod, rather than by proof rolling. Remove detected soft or loose zones and replace with imported structural fill as directed by the Geotechnical Engineer.
  - 10. If unsuitable bearing materials are a result of the Contractor's earthwork activities, excavation and backfill shall be completed at the Contractor's sole expense.
  - 11. Excavations for footings in areas with more than 3 feet of fill cannot commence until directed by the geotechnical engineer.
- B. Unauthorized Excavation:
  - 1. Excavation carried below the lines and grades shown on the Drawings or in excess of additional excavation of unsuitable soils directed by the Owner will be considered unauthorized. Unauthorized excavation, as well as remedial work resulting from unauthorized over-excavation, shall be at the Contractor's sole expense.
  - 2. Unauthorized over-excavation under footings, foundations, and retaining walls shall be corrected by replacing the excavated material with imported granular material compacted as specified in Part 3.4 of this Section, or as approved by the Geotechnical Engineer.
  - 3. Unauthorized over-excavation in areas to receive fill shall be corrected by replacing the excavated materials with fill placed and compacted as specified for the overlying materials.

4. Unauthorized over-excavation in other areas shall be corrected by replacing the excavated materials and compacting to a density not less than the underlying materials.
- C. Additional Excavation:
1. Excavation of materials determined by the Geotechnical Engineer to be unsuitable will be considered additional excavation.
  2. Additional excavation and subsequent backfilling will be paid based on contract conditions relative to changes in work.
  3. Excavation needed to remove unsuitable material that was caused by a failure of the subcontractor to protect the subgrade will not be paid by the owner.
- D. Temporary Sheet piling, Shoring, Bracing, or Sloping:
1. Provide and maintain temporary sheet piling, shoring, bracing, and sloping necessary to support the sides of excavations.
  2. Prevent any movement that may damage adjacent pavements, utilities, or structures, damage or delay the Work, or endanger life and health.
  3. Install, maintain, and remove sheet piling, shoring, bracing, and sloping as required by the Occupational Safety and Health Administration and other applicable governmental regulations and agencies.
- E. Disposal of Waste Material:
1. All waste materials and excess topsoil shall be stockpiled or disposed off site as directed by the Owner or Architect. Verify off-site disposal with the Owner.
  2. Restrict temporary storage of waste materials and materials to be reused at work areas to locations directed by the Owner or Architect.

### **3.2 SUBGRADE PREPARATION**

- A. Prepare subgrade as recommended in Section 31 10 00, Site Preparation
- B. Notify the Geotechnical Engineer prior to placing fill materials, constructing forms, or placing reinforcing steel or concrete.
- C. Proof roll the prepared subgrade with a loaded dump truck or similar heavy-wheeled construction equipment as directed by the Geotechnical Engineer. If construction occurs during the wet season or if the ground surface remains wet, the subgrade should be evaluated by the Geotechnical Engineer by probing with a steel rod, rather than by proof rolling.
- D. Excavate soft or loose zones as directed by the Geotechnical Engineer. Backfill to the specified elevation with imported granular or select structural fill. Compact as specified in Part 3.4 of this Section.
- E. Protection of Subgrade:
1. It is the responsibility of the contractor to protect subgrades at the site. Do not allow equipment to pump or rut subgrade, stripped areas, footing excavations, or other areas prepared for the project. Repair disturbed subgrade as specified below for unauthorized excavation, at no additional cost to the Owner. Possible alternatives for subgrade protection are described below. The alternatives are suggestions only and the actual subgrade protection method is the responsibility of



the contractor.

2. Staging areas:
  - a. Construct staging areas at the locations shown on the Drawings and as deemed necessary by the Contractor to protect subgrade. Alternatives include:
    - i. Construct staging areas with minimum 12-inch thickness of granular fill in areas without cement-treated subbase. Increase to a minimum thickness of 18 inches of granular material if the area will be subjected to heavy equipment or truck traffic.
    - ii. Provide a minimum 12-inch thickness of cement treated subbase overlain by 6 inches of granular material in light staging areas. Minimum 7-day unconfined compressive strength of the cement-treated subbase will be 100 pounds per square inch (psi).
  - b. Granular material shall consist of imported structural fill as specified in Part 2.1 of this Section and with less than 5 percent by dry weight passing the U.S. Standard No. 200 Sieve.
3. Haul Roads:
  - a. Construct haul roads at the locations shown on the Drawings and as deemed necessary by the Contractor to protect subgrade. Alternatives include:
    - i. Construct haul roads with a minimum thickness of 18 inches of granular fill in areas without cement-treated subbase.
    - ii. Construct haul roads with a minimum thickness of 16 inches of cement treated subgrade overlain by 9 inches of granular fill. Minimum 7-day unconfined compressive strength of the cement-treated subbase will be 100 psi.
  - b. Granular material shall consist of imported structural fill as specified in Part 2.1 of this Section, or an approved alternate.
4. Geotextile:
  - a. Place a geotextile as separation between the silty/clayey subgrade and the imported structural fill in all areas used as construction staging areas and as haul roads. A geotextile is not necessary if the cement amendment alternative is used.
  - b. Geotextile is specified in Part 2.1 of this Section.

### **3.3 GROUNDWATER AND SURFACE WATER CONTROL**

- A. Protect incomplete work from flooding during storms or from other causes. Thoroughly brace or otherwise protect all pipelines or structures not stable against uplift during construction or prior to completion.
- B. Take all necessary precautions to prevent disturbance and properly drain the areas upon which concrete is to be poured, pavement is to be placed, and pipe is to be laid.
- C. Do not allow water to accumulate in excavations. Remove water to prevent softening of the base of foundation excavations, undermining footings, and soil changes detrimental to stability of foundations.
- D. Convey water removed from excavations and rainwater to collecting or runoff areas. Establish and maintain temporary drainage ditches and other structures outside excavation limits for each structure.

- E. Ensure that dewatering operations will not adversely affect foundations, floor slabs, sidewalks, pavements, curbs, or other components of adjacent structures. Maintain recharge excavation free of groundwater for the time required to complete the work in a proper manner.

### 3.4 BACKFILL AND FILL

- A. General Backfill: Depending on soil and weather conditions, one alternative shall be considered for general backfill material. The base bid is select structural fill. Moisture-condition as required to achieve the required compaction.
- B. Notification of Geotechnical Engineer: Notify the Geotechnical Engineer 48 hours prior to any fill, backfill, or compaction operations.
  - 1. Permit Geotechnical Engineer to test all fill and backfill. Do not place additional fill or backfill unless the subgrade and/or previous layer of fill have been tested. A minimum of one test per 10,000 square feet of fill shall be completed for each lift unless otherwise directed by the Geotechnical Engineer.
  - 2. When requested by the Geotechnical Engineer, provide the field elevations of the compacted subgrade or fill layer.
  - 3. If based on the Geotechnical Engineer's reports and observations, subgrade or fill which has been placed is below specified density for respective construction areas, provide additional moisture conditioning and compaction at no additional expense to Owner.
- D. Compaction Requirements: Compact soils to not less than the following percentages of maximum dry density as determined in accordance with the ASTM D 1557 test procedure.
  - 1. Building Areas: Compact each layer of imported structural fill or imported granular material to at least 95 percent of the maximum dry density. Compact select structural fill consisting of silty or clayey soil to 92 percent of the maximum dry density. Compact cement treated structural fill as specified in Section 31 32 14, Cement Treated Structural Fill.
  - 2. Lawn, Unpaved, Unimproved Areas: Compact layer of fill or backfill material to at least 90 percent of the maximum dry density.
  - 3. Walkways, Pavement Areas: Compact each layer of imported backfill or granular fill materials to at least 95 percent of the maximum dry density. Compact select structural fill consisting of silty or clayey soil to 92 percent of the maximum dry density. Compact cement treated structural fill as specified in Section 31 32 14, Cement Treated Structural Fill.
  - 4. Retaining Wall or Below-Grade Walls: Except within the zone that is 3 feet horizontally from the back of the wall, compact each layer of imported backfill to at least 95 percent of the maximum dry density. Except within the zone that is 3 feet horizontally from the back of the wall, compact select structural fill consisting of silty or clayey soil to 92 percent of the maximum dry density. In the zone that is within 3 feet from the back of the wall, compact to between 89 and 90 percent of the maximum density using hand-held compaction equipment.
  - 5. Trench Excavation Backfill: Within building and pavement areas, compact trench backfill placed above the pipe zone to at least 92 percent of the maximum dry density at depths greater than 2 feet below the finished subgrade and to at least 95 percent of the maximum dry density within 2 feet of finished subgrade. In all other areas, compact trench backfill above the pipe zone to at least 90 percent of the maximum dry density.
  - 6. If traditional density testing methods are not applicable due to the presence of cobbles and large gravels in the fill, compaction evaluation should be assessed by

the Geotechnical Engineer by proof rolling or other methods deemed appropriate by the Geotechnical Engineer.

D. Placing Fill and Backfill Materials:

1. Spread backfill and fill materials uniformly adjacent to structures to required elevations.
2. Where compacted areas are disturbed by construction operations or adverse weather, scarify surface, reshape and compact to required density, or remove and replace with same class of material prior to further construction.
3. Spread imported granular materials and compact in uniform horizontal layers that do not exceed 12 inches prior to compaction.
4. Select structural fill shall be placed in layers that do not exceed 8 inches prior to compaction.
5. Fill or backfill materials compacted by hand-operated compaction equipment shall be placed in layers not exceeding 6 inches prior to compaction.
6. Compact soils using equipment designed for compacting the type of soil being placed. Use operating procedures to attain uniform compaction of the area being filled.
7. Do not place, spread, or compact fill material during freezing, rainy, or unfavorable weather conditions. All frozen or disturbed subgrade materials should be removed prior to placement of subsequent lifts of fill materials.
8. Do not place fill and backfill until tests and inspections have been made and the appropriate approvals have been obtained. Do not damage or displace underground utilities during backfilling and compaction.
9. Moisture-condition fill and backfill material as required to obtain specified compaction requirements. Accomplish soil wetting and drying by thoroughly mixing soil to provide a uniform soil moisture throughout each layer.

### 3.5 TRENCH EXCAVATION AND BACKFILL

A. Excavation:

1. Excavate trenches to the lines and grades shown on the Drawings. The width of trenches shall not be less than the diameter of the pipe plus 18 inches or greater than the diameter of the pipe plus 24 inches.

B. Placing Trench Stabilization Material:

1. The prepared subgrade shall be evaluated by the Geotechnical Engineer prior to placing pipe bedding material.
2. Excavate unsuitable trench bottom materials and replace with trench stabilization material placed and compacted as directed by the Geotechnical Engineer.
3. Thickness for stabilization material should be evaluated by Geotechnical Engineer. Base bid should be for 24 inches of stabilization rock in trenches deeper than 5 feet. Up to 36 inches of stabilization rock may be required in some areas where excessively soft soil exists.

C. Placing Pipe Bedding and Pipe Zone Material:

1. Place a minimum 4-inch thickness of bedding material over the full width of the trench to the elevation of the horizontal centerline of pipe.
2. Spread bedding and grade so pipe is uniformly supported along the barrel. Excavate bell holes at each joint to permit assembly and evaluation of the entire joint. Bed the pipe so that the flow line is at the required elevation.

3. Backfill the trench to 12 inches of the top of the pipe with pipe zone material. Place pipe zone material in loose lifts not exceeding 6 inches in uncompacted thickness simultaneously on both sides of the pipe.
  4. Carefully work pipe zone material under the sides of the pipe by slicing with a shovel or other approved procedure to provide a firm backing for the pipe and prevent lateral movement of the pipe.
  5. Compact pipe zone material to 90 percent of the maximum dry density or as recommended by the pipe manufacturer.
- D. Placing Trench Backfill Materials:
1. Backfill the remainder of the trench with imported granular structural fill. Compact as specified in Part 3.4 of this Section.

### **3.6 GRADING**

- A. Uniformly grade area within the limits of grading under this Section. Smooth finish surface within specified tolerances. Compact with uniform levels and slope between points where elevations are shown, or between such points and existing grades.
1. Grade Outside Building: Provide grades so water drains away from buildings and prevents ponding.
  2. Finish surfaces free from irregular surface changes, and to the following tolerances:
    - a. Lawn or Unpaved Areas: Rough grades shall be held 6 inches below finished grade in planting beds and 3 inches in lawn areas for placement of topsoil mix. Rough grade to facilitate all proposed drainage patterns and slope away from all structures or site facilities at a minimum of 2 percent grade. Rough grading shall remove all clods, roots, stones, or construction debris in landscape areas.
    - b. Walks: Shape surface of areas under walks to line, grade, and cross section with finished surface not more than 0.5 inch above or below required subgrade elevations.
    - c. Pavement: Shape surface of areas under pavements to line, grade and cross section with finished surface not more than 0.5 inch above or below required subgrade elevation.
    - d. Building Slabs: Grade smooth and even, free of voids, compacted as specified and to required elevations. Provide final grades within tolerance of 0.5 inch when tested with a 10-foot straight edge.
- B. Protection of Graded Area: Protect newly graded areas from traffic erosion by the use of crushed aggregate or other surfacable methods. Repair and reestablish grades within settled, eroded, and rutted areas to specified tolerances.

### **3.7 SETTLEMENT MONITORING**

- A. The contractor shall monitor settlement in areas where more than 3 feet of fill are required using settlement plates.
- B. The geotechnical engineer should determine the location of settlement plates. For preliminary purposes assume settlement plates be installed at a rate of one per 20,000 square feet of area where fills are greater than 3 feet in height.
- C. The settlement plates should be surveyed twice weekly. The settlement monitoring points should be monitored using survey equipment with accuracy of 1/100<sup>th</sup> of a foot and referenced to a stationary datum established at least 500 feet from fill placement.
- D. Excavations for footings should not be completed until settlement plates indicate settlement as a result of fills is complete. Geotechnical engineer will determine when

settlement is complete.

### **3.8 COMPLETION**

A. Remove waste materials, including unacceptable excavated materials, trash, debris, and native materials resulting from excavation and grading. Load, haul, and legally dispose of materials off site, or as otherwise directed on the Drawings or Division 1 of these specifications.

B. Sweep public streets and sidewalks free of spilled off-site borrow and surplus materials as it accumulates, at least one during each working day during hauling operations

End Section 31 05 13

## **Section 31 10 00 – SITE CLEARING**

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### **1 GENERAL**

#### **1.1 Summary**

1.1.A Section Includes:

- 1.1.A.1 Strip grass and sod and stockpile on-site.
- 1.1.A.2 Remove vegetation and brush and stockpile on-site.

1.1.B Related Sections:

- 1.1.B.1 Section 31 22 13 - Rough Grading.

#### **1.2 Unit Price – Measurement and Payment**

1.2.A Site Clearing:

- 1.2.A.1 Basis of Measurement: Site Clearing lump sum bid item.
- 1.2.A.2 Basis of Payment: Includes clearing site, stripping sod, removing vegetation and stockpiling materials on-site.

#### **1.3 Quality Assurance**

- 1.3.A.1 Remove a minimum of 90% of sod and vegetation as visually examined and determined by the Architect/Engineer.

### **2 PRODUCTS (not used)**

### **3 EXECUTION**

#### **3.1 Examination**

- 3.1.A Verify existing conditions before starting work.
- 3.1.B Verify existing plant life designated to remain is tagged or identified.
- 3.1.C Identify waste areas for stockpiling removed materials.

#### **3.2 Preparation**

- 3.2.A Call Local Utility Line Information service at **1-800-424-5555** or **811** not less than two working days before performing Work.
  - 3.2.A.1 Request underground utilities to be located and marked within and surrounding construction areas.

#### **3.3 Protection**

- 3.3.A Locate, identify, and protect utilities indicated to remain, from damage.
- 3.3.B Protect benchmarks, survey control points, and existing structures from damage or displacement.

### **3.4 Clearing, Grubbing, and Stripping**

3.4.A Remove all trees, shrubs, root balls, grass and other vegetation, existing improvements designated to be removed, and any waste materials in the planned building and pavement areas.

1. Grub out stumps and root balls to the depth of the roots, which could exceed 3.0 feet.
2. Backfill depressions resulting from grubbing with structural fill as specified in Section 31 00 00, Earthwork.
3. Prevent disturbance of subgrade soils.

3.4.B. Strip topsoil and surface vegetation from all building and pavement areas. Prevent mixing of the topsoil with the underlying subsoil or other objectionable materials. Stockpile topsoil in quantity and location specified by the Owner. Transport excess topsoil off site for disposal. Grade topsoil stockpiles to drain. Prevent wind and water erosion of stockpiles.

1. Remove (strip) surface organics and root zone material. If present, the stripping depth is expected to be 2 to 4 inches with an average of 3 inches.
2. Greater stripping depths may be required in areas of thick brush and to remove localized zones of soft or organic soils.
3. As discussed in the geotechnical report, the cultivated tilled zone will need to be improved in areas where less than 16 inches of cuts are planned. Prior to fill placement and construction, the upper 16 inches of subgrade should be improved by removing and replacing with structural fill or scarifying and re-compacting the on-site soil to structural fill requirements. Alternatively, cement amend the topsoil layer as recommended in Section 31 32 14, Cement Treated Structural Fill.

3.4.C. Dispose of all waste materials and excess topsoil off site.

### **3.5 COMPLETION**

A. Restoring Site Improvements:

1. Restore damaged site improvements to the conditions existing prior to the start of Work, as required by Architect and public authority having jurisdiction.
2. Restore site improvements damaged by the Contractor's operations at the sole expense of the Contractor.

B. Contact Geotechnical Engineer to verify that structures, vegetation, and roots have been adequately removed from all improvement areas.

End Section 31 10 00

**SECTION 01 20 00**  
**PRICE AND PAYMENT PROCEDURES**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Procedures for preparation and submittal of applications for progress payments.
- B. Procedures for preparation and submittal of application for final payment.

**1.02 RELATED SECTIONS**

- A. Document 00 52 13 - Contract
- B. Document 00 72 13 - General Conditions: Additional requirements for progress payments, final payment, changes in the work.

**1.03 SCHEDULE OF VALUES**

- A. Submit a printed schedule on AIA Form G703 - Application and Certificate for Payment Continuation Sheet or Contractor's standard form.
- B. Revise schedule to list approved Change Orders, with each Application For Payment.

**1.04 APPLICATIONS FOR PROGRESS PAYMENTS**

- A. Payment Period: Submit at intervals stipulated in the Agreement.
- B. Present required information in typewritten form.
- C. Form: AIA G702 Application and Certificate for Payment and AIA G703 - Continuation Sheet.
- D. Execute certification by signature of authorized officer.
- E. List each authorized Change Order as a separate line item, listing Change Order number and dollar amount as for an original item of Work.
- F. Submit electronic copies of each Application for Payment.
- G. Include the following with the application:
  - 1. Transmittal letter as specified for Submittals in Section 01 30 00.
  - 2. Construction progress schedule, revised and current as specified in Section 01 30 00.
  - 3. Current construction photographs specified in Section 01 30 00.
  - 4. Partial release of liens from major Subcontractors and vendors.
  - 5. Other items required by the Client contract requirements noted in Division 0 of Volume 1.

**1.05 MODIFICATION PROCEDURES**

- A. Mackenzie will advise of minor changes in the Work not involving an adjustment to Contract Sum or Contract Time as authorized by the Conditions of the Contract by issuing supplemental instructions on AIA Form G710.
- B. Construction Change Directive: Mackenzie may issue a document, signed by Owner, instructing General Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
  - 1. The document will describe changes in the Work, and will designate method of determining any change in Contract Sum or Contract Time.
  - 2. Promptly execute the change in Work.
- C. Proposal Request: Mackenzie may issue a document which includes a detailed description of a proposed change with supplementary or revised Drawings and specifications, a change in Contract Time for executing the change with a stipulation of any overtime work required and the period of time during

which the requested price will be considered valid. General Contractor shall prepare and submit a fixed price quotation within 10 days.

- D. General Contractor may propose a change by submitting a request for change to Mackenzie, describing the proposed change and its full effect on the Work, with a statement describing the reason for the change, and the effect on the Contract Sum and Contract Time with full documentation and a statement describing the effect on Work by separate or other contractors. Document any requested substitutions in accordance with Section 01 60 00.
- E. Execution of Change Orders: The General Contractor will issue Change Orders for signatures of parties as provided in the Conditions of the Contract on AIA G701.
- F. After execution of Change Order, promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Sum.
- G. Promptly revise progress schedules to reflect any change (if any change) in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.
- H. Promptly enter changes in Project Record Documents.

#### **1.06 APPLICATION FOR FINAL PAYMENT**

- A. Prepare Application for Final Payment as specified for progress payments, identifying total adjusted Contract Sum, previous payments, and sum remaining due.
- B. Application for Final Payment will not be considered until the following have been accomplished:
  - 1. All closeout procedures, manuals and Record Drawings specified in Section 01 70 00 and 01780.

#### **PART 2 PRODUCTS - NOT USED**

#### **PART 3 EXECUTION - NOT USED**

**END OF SECTION**



**SECTION 04 05 11**  
**MORTAR AND MASONRY GROUT**

**PART 1 GENERAL****1.01 SECTION INCLUDES**

- A. Mortar for masonry.
- B. Grout for masonry.

**1.02 RELATED REQUIREMENTS**

- A. Section 04 20 00 - Unit Masonry: Installation of mortar and grout.

**1.03 REFERENCE STANDARDS**

- A. ASTM C94/C94M - Standard Specification for Ready-Mixed Concrete.
- B. ASTM C270 - Standard Specification for Mortar for Unit Masonry.
- C. ASTM C387/C387M - Standard Specification for Packaged, Dry, Combined Materials for Concrete and High Strength Mortar.
- D. ASTM C476 - Standard Specification for Grout for Masonry.

**1.04 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Include design mix and indicate whether the Proportion or Property specification of ASTM C270 is to be used. Also include required environmental conditions and admixture limitations.

**PART 2 PRODUCTS****2.01 MORTAR AND GROUT APPLICATIONS**

- A. Use only factory premixed packaged dry materials for mortar and grout, with addition of water only at project site.
  - 1. Exception: If a specified mix design is not available in a premixed dry package, provide equivalent mix design using standard non-premixed materials.
- B. Mortar Color: Natural gray unless otherwise indicated.
- C. Mortar Mix Designs: ASTM C270, Property Specification.
  - 1. Exterior, Loadbearing Masonry: Type N.
- D. Grout Mix Designs:
  - 1. Masonry: 3,000 psi strength at 28 days; 8-10 inches slump; provide premixed type in accordance with ASTM C 94/C 94M.
    - a. Fine grout for spaces with smallest horizontal dimension of 2 inches or less.
    - b. Coarse grout for spaces with smallest horizontal dimension greater than 2 inches.

**2.02 MATERIALS**

- A. Packaged Dry Material for Mortar for Unit Masonry: Premixed Portland cement, hydrated lime, and sand; complying with ASTM C387/C387M and capable of producing mortar of the specified strength in accordance with ASTM C270 with the addition of water only.
  - 1. Color: Standard gray.
- B. Water: Clean and potable.
- C. Bonding Agent: Latex type.

**2.03 GROUT MIXING**

- A. Mix grout in accordance with ASTM C94/C94M.
- B. Thoroughly mix grout ingredients in quantities needed for immediate use in accordance with ASTM C476 for fine and coarse grout.

**PART 3 EXECUTION**

**3.01 PREPARATION**

- A. Apply bonding agent to existing stone surfaces if required by grout manufacturer.

**3.02 INSTALLATION**

- A. Install mortar and grout to requirements of section(s) in which masonry is specified.
- B. Remove excess mortar from grout spaces.

**END OF SECTION**

**SECTION 04 20 00****UNIT MASONRY****PART 1 GENERAL****1.01 RELATED REQUIREMENTS**

- A. Section 04 05 11 - Mortar and Masonry Grout.

**1.02 REFERENCE STANDARDS**

- A. ACI 530/530.1/ERTA - Building Code Requirements and Specification for Masonry Structures and Related Commentaries.
- B. ASTM A36/A36M - Standard Specification for Carbon Structural Steel.
- C. ASTM A82/A82M - Standard Specification for Steel Wire, Plain, for Concrete Reinforcement.
- D. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon Steel Bars for Concrete Reinforcement.
- E. ASTM A641/A641M - Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire.
- F. ASTM A1064/A1064M - Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete.
- G. ASTM C90 - Standard Specification for Loadbearing Concrete Masonry Units.
- H. ASTM C144 - Standard Specification for Aggregate for Masonry Mortar.
- I. BIA Technical Notes No. 13 - Ceramic Glazed Brick Exterior Walls.
- J. TMS 402/602 - Building Code Requirements and Specification for Masonry Structures.

**1.03 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data for masonry units, fabricated wire reinforcement, mortar, and masonry accessories.
- C. Shop Drawings: Indicate pertinent dimensions, materials, anchorage, size and type of fasteners, and accessories for brickwork support system.
  - 1. Include calculations or selections from the manufacturer's prescriptive design tables that indicate compliance with the applicable building code and project conditions.
  - 2. Include the design engineer's stamp or seal on each sheet of shop drawings.

**1.04 QUALITY ASSURANCE**

- A. Comply with provisions of ACI 530/530.1/ERTA, except where exceeded by requirements of the contract documents.
- B. Manufacturer Qualifications: Company specializing in manufacturing the type of products specified in this section with minimum three years of documented experience.
- C. Installer Qualifications: Company specializing in performing work of the type specified and with at least three years of documented experience.

**PART 2 PRODUCTS****2.01 CONCRETE MASONRY UNITS**

- A. Concrete Block: Comply with referenced standards and as follows:
  - 1. Size: Standard units with nominal face dimensions of 16 x 8 inches and nominal depth of 8 inches.
  - 2. Load-Bearing Units: ASTM C90, normal weight.

**2.02 MORTAR AND GROUT MATERIALS**

- A. Mortar and grout: As specified in Section 04 05 11.

**2.03 REINFORCEMENT AND ANCHORAGE**

- A. Reinforcing Steel: ASTM A615/A615M Grade 40 (280) deformed billet bars; galvanized.
- B. Single Wythe Joint Reinforcement: Truss or ladder type; ASTM A 82/A 82M steel wire, mill galvanized to ASTM A 641/A 641M, Class 3; 0.1483 inch side rods with 0.1483 inch cross rods; width as required to provide not more than 1 inch and not less than 1/2 inch of mortar coverage on each exposure.

**2.04 ACCESSORIES**

- A. Preformed Control Joints: Rubber material. Provide with corner and tee accessories, fused joints.
- B. Joint Filler: Closed cell polyvinyl chloride; oversized 50 percent to joint width; self expanding; 1/2 inch wide x by maximum lengths available.
- C. Cleaning Solution: Non-acidic, not harmful to masonry work or adjacent materials.

**PART 3 EXECUTION****3.01 EXAMINATION**

- A. Verify that field conditions are acceptable and are ready to receive masonry.
- B. Verify that related items provided under other sections are properly sized and located.
- C. Verify that built-in items are in proper location, and ready for roughing into masonry work.

**3.02 PREPARATION**

- A. Direct and coordinate placement of metal anchors supplied for installation under other sections.
- B. Provide temporary bracing during installation of masonry work. Maintain in place until building structure provides permanent bracing.

**3.03 COLD AND HOT WEATHER REQUIREMENTS**

- A. Comply with requirements of ACI 530/530.1/ERTA or applicable building code, whichever is more stringent.

**3.04 COURSING**

- A. Establish lines, levels, and coursing indicated. Protect from displacement.
- B. Maintain masonry courses to uniform dimension. Form vertical and horizontal joints of uniform thickness.
- C. Concrete Masonry Units:
  - 1. Bond: Running.
  - 2. Coursing: One unit and one mortar joint to equal 8 inches.
  - 3. Mortar Joints: Concave.

**3.05 PLACING AND BONDING**

- A. Lay solid boulders in full bed of mortar, with full head joints, uniformly jointed with other work.
- B. Remove excess mortar and mortar smears as work progresses.
- C. Remove excess mortar with water repellent admixture promptly. Do not use acids, sandblasting or high pressure cleaning methods.

**3.06 WEEPS/CAVITY VENTS**

- A. Install weeps in veneer and cavity walls at 24 inches on center horizontally above through-wall flashing, above shelf angles and lintels, and at bottom of walls.

**3.07 CAVITY MORTAR CONTROL**

- A. Do not permit mortar to drop or accumulate into cavity air space or to plug weep/cavity vents.

**3.08 REINFORCEMENT AND ANCHORAGE - GENERAL**

- A. Unless otherwise indicated on drawings or specified under specific wall type, install horizontal joint reinforcement 16 inches on center.
- B. Place continuous joint reinforcement in first and second joint below top of walls.
- C. Reinforce stack bonded unit joint corners and intersections with strap anchors 16 inches on center.

**3.09 CONTROL AND EXPANSION JOINTS**

- A. Install preformed control joint device in continuous lengths. Seal butt and corner joints in accordance with manufacturer's instructions.

**3.10 CLEANING**

- A. Remove excess mortar and mortar droppings.
- B. Replace defective mortar. Match adjacent work.
- C. Clean soiled surfaces with cleaning solution.
- D. Use non-metallic tools in cleaning operations.

**END OF SECTION**



**SECTION 09 65 00  
RESILIENT FLOORING**

**PART 1 GENERAL****1.01 SECTION INCLUDES**

- A. Resilient sheet flooring.
- B. Resilient base.
- C. Installation accessories.

**1.02 REFERENCE STANDARDS**

- A. ASTM F710 - Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring.
- B. ASTM F1303 - Standard Specification for Sheet Vinyl Floor Covering with Backing.
- C. ASTM F1861 - Standard Specification for Resilient Wall Base.
- D. ASTM F1913 - Standard Specification for Vinyl Sheet Floor Covering Without Backing.

**1.03 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on specified products, describing physical and performance characteristics; including sizes, patterns and colors available; and installation instructions.
- C. Verification Samples: Submit three samples, 2 by 2 inch in size illustrating color and pattern for each resilient flooring product specified.
- D. Maintenance Data: Include maintenance procedures, recommended maintenance materials, and suggested schedule for cleaning, stripping, and re-waxing.
- E. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
  - 1. See Section 01 60 00 - Product Requirements, for additional provisions.
  - 2. Extra Flooring Material: 50 square feet of each type and color.
  - 3. Extra Wall Base: 10 linear feet of each type and color.

**1.04 DELIVERY, STORAGE, AND HANDLING**

- A. Protect roll materials from damage by storing on end.

**1.05 FIELD CONDITIONS**

- A. Store materials for not less than 48 hours prior to installation in area of installation at a temperature of 70 degrees F to achieve temperature stability. Thereafter, maintain conditions above 55 degrees F.

**PART 2 PRODUCTS****2.01 SHEET FLOORING**

- A. Vinyl Sheet Flooring: Homogeneous without backing, with color and pattern throughout full thickness.
  - 1. Manufacturers:
    - a. Armstrong Flooring, Inc; Accolade Plus: [www.armstrongflooring.com/#sle](http://www.armstrongflooring.com/#sle).
    - b. Mannington Commercial.
  - 2. Minimum Requirements: Comply with ASTM F1913.
  - 3. Thickness: 0.080 inch nominal.
  - 4. Integral coved base with cap strip.
  - 5. Color: To be selected by Mackenzie from manufacturer's full range.

**2.02 RESILIENT BASE**

- A. Resilient Base: ASTM F1861, Type TS rubber, vulcanized thermoset; top set Style B, Cove.
  - 1. Manufacturers:
    - a. Johnsonite, a Tarkett Company: [www.johnsonite.com](http://www.johnsonite.com).
    - b. Roppe Corp; \_\_\_\_\_: [www.roppe.com/#sle](http://www.roppe.com/#sle).
    - c. Substitutions: See Section 01 60 00 - Product Requirements.
  - 2. Height: 4 inch.
  - 3. Thickness: 0.125 inch thick.
  - 4. Finish: Satin.
  - 5. Length: Roll.
  - 6. Color: Refer to Material Finish Key in Drawings.
  - 7. Accessories: Premolded external corners and internal corners.

**2.03 ACCESSORIES**

- A. Primers, Adhesives, and Seam Sealer: Waterproof; types recommended by flooring manufacturer.
  - 1. VOC Content Limits: less than 50g/L
- B. Adhesive for Vinyl Flooring:
- C. Filler for Coved Base: Plastic.

**PART 3 EXECUTION****3.01 EXAMINATION**

- A. Verify that wall surfaces are smooth and flat within the tolerances specified for that type of work, are dust-free, and are ready to receive resilient base.
- B. Cementitious Sub-floor Surfaces: Verify that substrates are dry enough and ready for resilient flooring installation by testing for moisture and pH.
  - 1. Obtain instructions if test results are not within limits recommended by resilient flooring manufacturer and adhesive materials manufacturer.

**3.02 PREPARATION**

- A. Prepare floor substrates as recommended by flooring and adhesive manufacturers.
- B. Clean substrate.

**3.03 INSTALLATION - GENERAL**

- A. Starting installation constitutes acceptance of wall conditions.
- B. Install in accordance with manufacturer's written instructions.
- C. Spread only enough adhesive to permit installation of materials before initial set.
- D. Place copper grounding strip in conductive adhesive and apply additional adhesive to top side of strip before installing static control flooring. Allow strip to extend beyond flooring in accordance with static control flooring manufacturer's instructions. Refer to Section 26 05 26 for grounding and bonding to building grounding system.
- E. Fit joints and butt seams tightly.

**3.04 INSTALLATION - SHEET FLOORING**

- A. Lay flooring with joints and seams parallel to longer room dimensions, to produce minimum number of seams. Lay out seams to avoid widths less than 1/3 of roll width; match patterns at seams.



- B. Coved Base: Install as detailed on drawings, using coved base filler as backing at floor to wall junction. Extend sheet flooring vertically to height indicated, and cover top edge with metal cap strip.

### **3.05 INSTALLATION - RESILIENT BASE**

- A. Fit joints tightly and make vertical. Maintain minimum dimension of 18 inches between joints.
- B. Miter internal corners. At external corners, use premolded units. At exposed ends, use premolded units.
- C. Install base on solid backing. Bond tightly to wall and floor surfaces.
- D. Scribe and fit to door frames and other interruptions.

### **3.06 CLEANING**

- A. Remove excess adhesive from floor, base, and wall surfaces without damage.
- B. Clean in accordance with manufacturer's written instructions.

### **3.07 PROTECTION**

- A. Prohibit traffic on resilient flooring for 48 hours after installation.

**END OF SECTION**



SECTION 01 60 01  
SUBSTITUTION REQUEST FORM

PROJECT: PORT OF KICKITAT - INDUSTRIAL PARK MACKENZIE PROJECT #2190380.01

CONTRACTOR: *Crestline Construction*

## SPECIFIED ITEM:

Section: *13-2.01* Page: *3* Paragraph: *2.01 A*Description: *Include Pacific Building Systems to manufacturers list.  
pbsbuilding.com*

The undersigned requests consideration of the following:

## PROPOSED SUBSTITUTION:

1. Attached data includes product description, specifications, drawings, photographs, performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.
2. Attached data also includes description of changes to Contract Documents which proposed substitution will require for its proper installation.
3. Attached data clearly identifies deviations from the Contract Documents.

The undersigned states that the following paragraphs, unless modified on attachments, are correct:

1. The proposed substitution does not affect dimensions shown on Drawings.
2. The undersigned will pay for changes to the building design, including engineering design, detailing and construction costs caused by the requested substitution.
3. The proposed substitution will have no adverse affect on other trades, the construction schedule, or specified warranty requirements.
4. Maintenance and service parts will be locally available for the proposed substitution.

The undersigned further states that the function, appearance and quality of the Proposed Substitution are equivalent or superior to the Specified Item.

Submitted By: *Sam Krentz*Signature: *Sam Krentz*Date: *09-24-2020*Firm: *Crestline Const.*Address: *3600 Cantelway, The Dalles OR 97058*Telephone: *541-288-8287*

Attachments:

Below for use by Design Consultant:

☒ Accepted:☐ Not Accepted:☐ Accepted as Noted:☐ Received too Late:By: *Ryan Weston*Date: *09.29.2020*

Remarks:

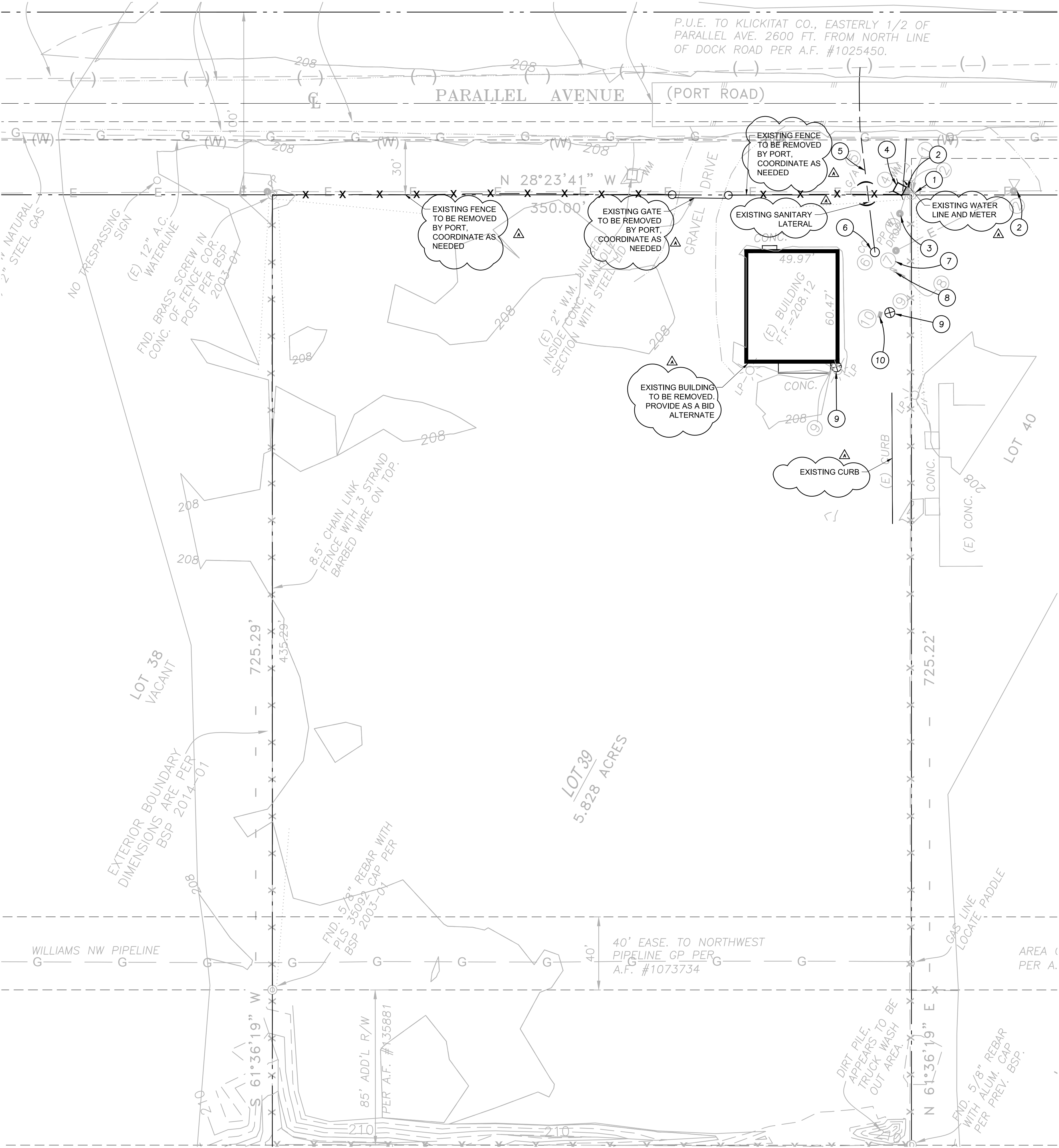
| CIVIL DOCUMENT CHANGE LOG                                                                  |                |               |               |                               |              | Mackenzie<br>1515 SE Water Ave, Ste 100, Portland OR 97214 (503) 224-9560                                                                                                                                                                                                                                                                               |
|--------------------------------------------------------------------------------------------|----------------|---------------|---------------|-------------------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PROJECT NAME:<br>Port of Klickitat - DIP 151C                                              |                |               |               | PROJECT NUMBER:<br>2190380.01 |              | LOG AS OF:<br>09/30/2020                                                                                                                                                                                                                                                                                                                                |
| SHEET/SPEC #                                                                               | REVISION TITLE | SHEET DELTA # | REVISION DATE | INITIATE                      | DISTRIBUTION | REMARKS:<br><br>NOTE: The purpose of this Document Change Log is to maintain a general record of revisions on a project. The information is purposefully concise and is not intended to provide detailed descriptions of revisions. All persons utilizing this log are responsible to review the drawings and other documents related to each revision. |
| KEY: 1. Owner   2. Contractor   3. A/E   4. Governmental Agency   5. Consultant   6. Other |                |               |               |                               |              |                                                                                                                                                                                                                                                                                                                                                         |
| Sort1                                                                                      | Sort2          | Sort3         | Sort4         | Sort5                         | Sort6        | Sort7                                                                                                                                                                                                                                                                                                                                                   |
| C1.00                                                                                      | ADDENDUM #1    | A             | 9/30/2020     | 1                             | 1,2,3        | REVISED NOTES FOR FENCE TO BE REMOVED BY PORT, ALL EXISTING UTILITIES TO REMAIN, AND REMOVAL OF BUILDING TO BE INCLUDED AS BID ALTERNATE.                                                                                                                                                                                                               |
| C1.11                                                                                      | ADDENDUM #1    | A             | 9/30/2020     | 1                             | 1,2,3        | ADJUSTED METER LOCATIONS AND ADDED GAS METER LOCATION.                                                                                                                                                                                                                                                                                                  |

| LANDSCAPE DOCUMENT CHANGE LOG                                                              |                |               |               |                               |              | Mackenzie<br>1515 SE Water Ave, Ste 100, Portland OR 97214 (503) 224-9560                                                                                                                                                                                                                                                                               |
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| PROJECT NAME:<br>Port of Klickitat - DIP 151C                                              |                |               |               | PROJECT NUMBER:<br>2190380.01 |              | LOG AS OF:<br>09/29/2020                                                                                                                                                                                                                                                                                                                                |
| SHEET/SPEC #                                                                               | REVISION TITLE | SHEET DELTA # | REVISION DATE | INITIATE                      | DISTRIBUTION | REMARKS:<br><br>NOTE: The purpose of this Document Change Log is to maintain a general record of revisions on a project. The information is purposefully concise and is not intended to provide detailed descriptions of revisions. All persons utilizing this log are responsible to review the drawings and other documents related to each revision. |
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| Sort1                                                                                      | Sort2          | Sort3         | Sort4         | Sort5                         | Sort6        | Sort7                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                            | ADDENDUM #1    | A             | 9/30/2020     | 3                             | 1,2,3        | REMOVED PLANT SCHEDULE.                                                                                                                                                                                                                                                                                                                                 |
| L1.10                                                                                      | ADDENDUM #1    | A             | 9/30/2020     | 3                             | 1,2,3        | ADDED HATCH AREAS FOR DISTURBED AREA WITH NOTE FOR SEED MIX TO BE PROVIDED. ADDED HATCH AREA FOR PLANTING AREA TO GET TOPSOIL AND IRRIGATION PROVIDED BY GC.                                                                                                                                                                                            |
| L1.11                                                                                      | ADDENDUM #1    | A             | 9/30/2020     | 3                             | 1,2,3        | ADDED HATCH AREAS FOR DISTURBED AREA WITH NOTE FOR SEED MIX TO BE PROVIDED. ADDED HATCH AREA FOR PLANTING AREA TO GET TOPSOIL AND IRRIGATION PROVIDED BY GC.                                                                                                                                                                                            |

| STRUCTURAL DOCUMENT CHANGE LOG                                                             |                |               |               |                               |              | Mackenzie<br>1515 SE Water Ave, Ste 100, Portland OR 97214      (503) 224-9560                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------|----------------|---------------|---------------|-------------------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PROJECT NAME:<br>Port of Klickitat - DIP 151C                                              |                |               |               | PROJECT NUMBER:<br>2190380.01 |              | LOG AS OF:<br><b>09/30/2020</b>                                                                                                                                                                                                                                                                                                                         |
| SHEET/SPEC #                                                                               | REVISION TITLE | SHEET DELTA # | REVISION DATE | INITIATE                      | DISTRIBUTION | REMARKS:<br><br>NOTE: The purpose of this Document Change Log is to maintain a general record of revisions on a project. The information is purposefully concise and is not intended to provide detailed descriptions of revisions. All persons utilizing this log are responsible to review the drawings and other documents related to each revision. |
| KEY: 1. Owner   2. Contractor   3. A/E   4. Governmental Agency   5. Consultant   6. Other |                |               |               |                               |              |                                                                                                                                                                                                                                                                                                                                                         |
| Sort1                                                                                      | Sort2          | Sort3         | Sort4         | Sort5                         | Sort6        | Sort7                                                                                                                                                                                                                                                                                                                                                   |
| S0.00                                                                                      | ADDENDUM #1    | A             | 9/30/2020     | 3                             | 1,2,3        | adjusted snow load in PEMB data table to 35 PSF                                                                                                                                                                                                                                                                                                         |
| S0.22                                                                                      | ADDENDUM #1    | A             | 9/30/2020     | 3                             | 1,2,3        | adjusted detail callout within details 11&12 to reference 1/S0.22 in lieu of 17/S0.20                                                                                                                                                                                                                                                                   |

| ARCHITECTURAL DOCUMENT CHANGE LOG                                                          |                |               |               |                               |              | Mackenzie<br>1515 SE Water Ave, Ste 100, Portland OR 97214 (503) 224-9560                                                                                                                                                                                                                                                                               |
|--------------------------------------------------------------------------------------------|----------------|---------------|---------------|-------------------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PROJECT NAME:<br>Port of Klickitat - DIP 151C                                              |                |               |               | PROJECT NUMBER:<br>2190380.01 |              | LOG AS OF:<br>09/30/2020                                                                                                                                                                                                                                                                                                                                |
| SHEET/SPEC #                                                                               | REVISION TITLE | SHEET DELTA # | REVISION DATE | INITIATE                      | DISTRIBUTION | REMARKS:<br><br>NOTE: The purpose of this Document Change Log is to maintain a general record of revisions on a project. The information is purposefully concise and is not intended to provide detailed descriptions of revisions. All persons utilizing this log are responsible to review the drawings and other documents related to each revision. |
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| Sort1                                                                                      | Sort2          | Sort3         | Sort4         | Sort5                         | Sort6        | Sort7                                                                                                                                                                                                                                                                                                                                                   |
| G1.10                                                                                      | ADDENDUM #1    | A             | 9/30/2020     | 3                             | 1,2,3        | REVISED CONSTRUCTION TYPE TO IIB, REMOVED FIRE PROTECTION CALL OUT, REVISED S-1 CALLOUT, AND ADDED F-1 INDUSTRIAL CALLOUT                                                                                                                                                                                                                               |
| A0.01                                                                                      | ADDENDUM #1    | A             | 9/30/2020     | 3                             | 1,2,3        | REMOVED GENERAL NOTES T, U, V, W, AND Y.                                                                                                                                                                                                                                                                                                                |
| A1.10                                                                                      | ADDENDUM #1    | A             | 9/30/2020     | 3                             | 1,2,3        | REVISED DOWNSPOUT SIZE AND GUTTER SIZE.                                                                                                                                                                                                                                                                                                                 |
| A2.10                                                                                      | ADDENDUM #1    | A             | 9/30/2020     | 3                             | 1,2,3        | ADDED DIMENSION FOR CANOPY AND WAINSCOTTING                                                                                                                                                                                                                                                                                                             |
| A2.10A                                                                                     | ADDENDUM #1    | A             | 9/30/2020     | 3                             | 1,2,3        | ADDED DIMENSION FOR CANOPY AND WAINSCOTTING                                                                                                                                                                                                                                                                                                             |
| A4.10                                                                                      | ADDENDUM #1    | A             | 9/30/2020     | 3                             | 1,2,3        | REMOVED RCP NOTES, A, B, C, D, AND F. REMOVED KEYNOTE 16. REMOVED DETAIL 7/A5.20 TAG.                                                                                                                                                                                                                                                                   |
| A5.20                                                                                      | ADDENDUM #1    | A             | 9/30/2020     | 3                             | 1,2,3        | REVISED DETAIL 2/A5.20 FOR 9 FT CEILING HEIGHT                                                                                                                                                                                                                                                                                                          |
| A6.10                                                                                      | ADDENDUM #1    | A             | 9/30/2020     | 3                             | 1,2,3        | REMOVED CARPET FROM SCHEDULE, REMOVED DETAIL TAGS AT STOREFRONT ELEVATION, ADJUSTED PLUMBING FOR TOILET ROOMS AS SHOWN PER PLAN, ADJUSTED HVAC SPEC REMOVING OFFICE REQUIREMENT (C), ADJUSTED NOTES C, F, AND ADDED NOTE I IN ELECTRICAL SPECS.                                                                                                         |





EXISTING NOTES

- 1

FND. 5/8" REBAR WITH ALUM. CAP AS FND. IN BSP 2014-01. S12°21'18"W-0.17' FROM CALC. POS. FALLS BETWEEN TWO FENCE CORNER POSTS.
- 2

EXISTING POWER POLE WITH TRANSFORMER
- 3

EXISTING POWER POLE WITH SERVICE DROP
- 4

EXISTING 1" WATER METER
- 5

EXISTING 8" PVC SANITARY SEWER SERVICE LINE
- 6

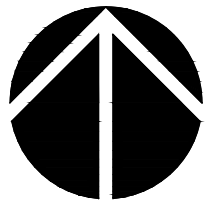
(E) SAN. CLEAN OUT RIM= 207.22 I.E.= 204.7±
- 7

EXISTING POWER POLE WITH SERVICE DROP AND METER
- 8

EXISTING CONTROL VALVE BOX, USE UNKNOWN
- 9

EXISTING HOSE BIB
- 10

2@3" BLACK ABS SEWER PIPE, BELIEVED TO BE SAN. SEWER FOR RV CONNECTIONS

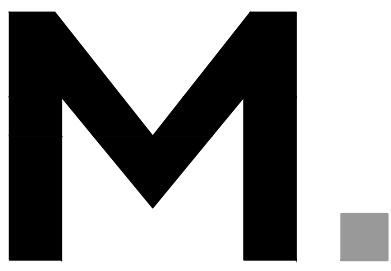


1  
C1.00

EXISTING CONDITIONS AND DEMOLITION PLAN



( IN FEET )  
1 inch = 30 ft.



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| REVISION SCHEDULE |             |            |
|-------------------|-------------|------------|
| Delta             | Issued As   | Issue Date |
| A                 | ADDENDUM #1 | 9/30/2020  |
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SHEET TITLE:  
EXISTING  
CONDITIONS  
AND  
DEMOLITION  
PLAN

DRAWN BY: JAZ

CHECKED BY:

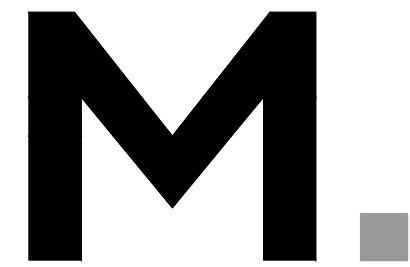
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JOB NO.  
2190380.01

BID SET - SEPTEMBER 14, 2020





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| REVISION SCHEDULE |             |            |
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| Delta             | Issued As   | Issue Date |
| A                 | ADDENDUM #1 | 9/30/2020  |
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SHEET TITLE:  
**SITE PLAN**

DRAWN BY: CTL  
CHECKED BY:  
SHEET:

**C1.11**  
JOB NO. **2190380.01**

## KEYNOTES

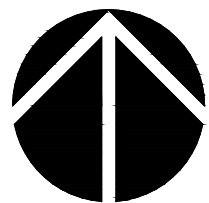
1. ASPHALT PAVEMENT PER 7/C5.10
2. WATER METER, SEE UTILITY PLAN
3. DOUBLE CHECK VALVE ASSEMBLY, SEE UTILITY PLAN
4. SAWCUT EXISTING ASPHALT, SEE 3/C5.11
5. TRUNCATED DOMES, SEE 6/C5.10
6. SIDEWALK, SEE 3/C5.10
7. 24" PAVED PRIVATE ROAD EXTENSION
8. NOT USED
9. BIOINFILTRATION SWALE, SEE UTILITY PLAN
10. CONCRETE VERTICAL CURB, SEE 4/C5.10
11. GRAVEL INFILTRATION TRENCH, SEE UTILITY PLAN
12. PARALLEL CURB RAMP, SEE 2/C5.10
13. ACCESSIBLE PARKING STALL AND SIGNAGE, SEE 1/C5.10
14. 4" WIDE WHITE PARKING STALL STRIPING
15. FIRE HYDRANT, SEE UTILITY PLAN
16. FIRE DEPARTMENT CONNECTION, SEE UTILITY PLAN
17. DRYWELL, SEE UTILITY PLAN
18. LANDSCAPED AREA, SEE LANDSCAPING PLANS
19. RIPRAP OUTFALL, SEE 8/C5.10
20. SANITARY MANHOLE, SEE UTILITY PLAN
21. DRIVE IN DOOR
22. PROPOSED BUILDING, SEE ARCHITECTURAL PLANS
23. EDGE OF ASPHALT
24. PROPERTY LINE
25. CATCH BASIN, SEE 4/C5.11
26. PROPOSED KNOX BOX
27. PROPOSED ACCESSIBLE AISLE SIGN, SEE 9/C5.10
28. PROPOSED RETAINING WALL - SEE GRADING PLAN

## PARKING DATA

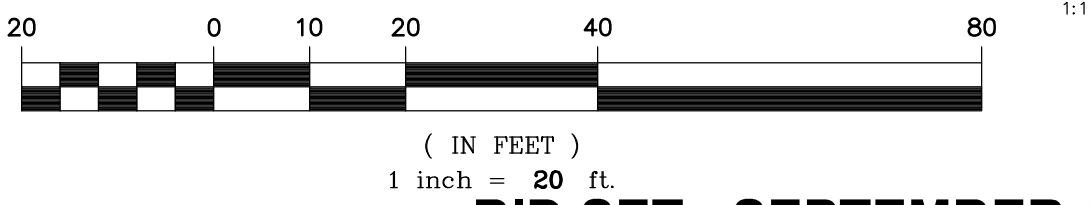
|                 |           |
|-----------------|-----------|
| TOTAL SPACES    | 10 SPACES |
| ADA SPACES      | 1 SPACE   |
| STANDARD SPACES | 9 SPACES  |

## SITE AREA

|                       |                      |
|-----------------------|----------------------|
| SITE AREA             | 253,839 SF (5.83 AC) |
| BUILDING AREA         | 4,970 SF (0.11 AC)   |
| PAVING AREA           | 18,809 SF (0.43 AC)  |
| TOTAL IMPERVIOUS AREA | 23,809 SF (0.54 AC)  |
| LANDSCAPE AREA        | 230,030 SF (5.29 AC) |



1 SITE PLAN  
C1.11



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GENERAL NOTES

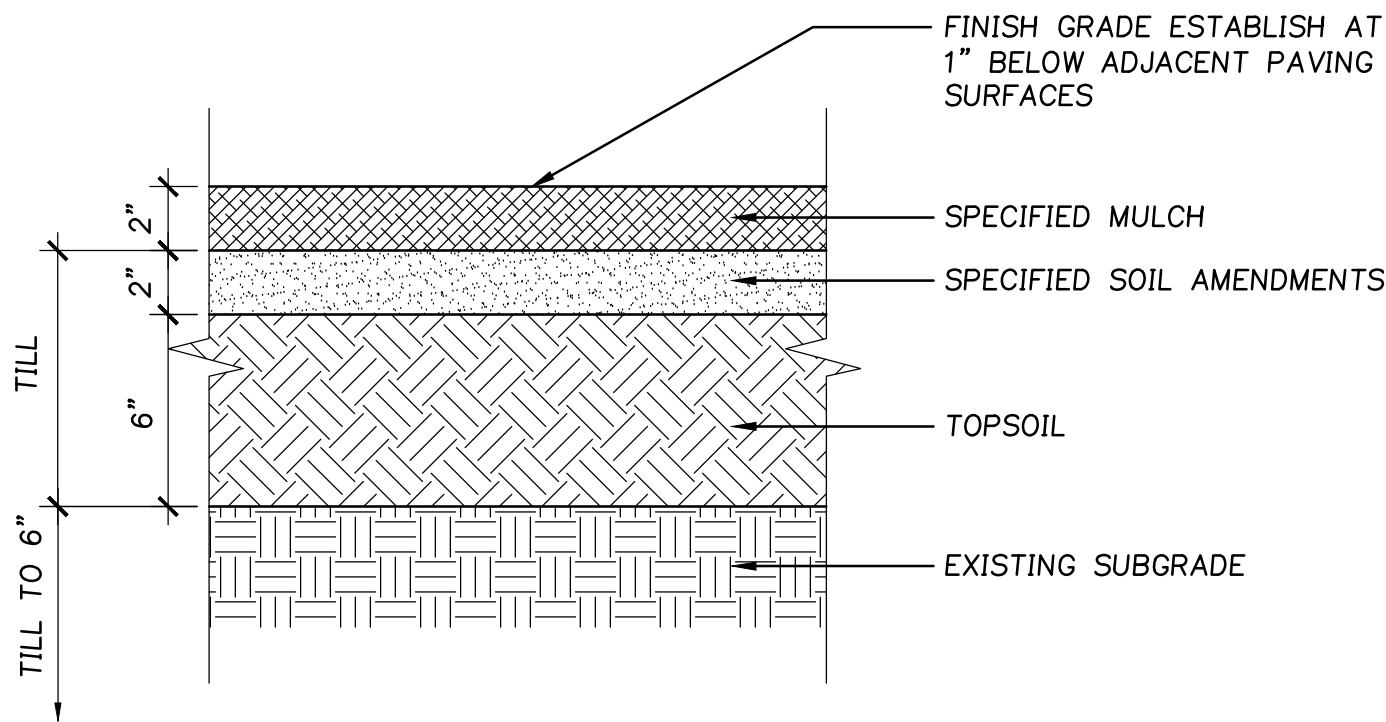
- 1. EXISTING AREAS PROPOSED FOR NEW PLANT MATERIAL SHALL BE CLEARED AND LEGALLY DISPOSED UNLESS NOTED OTHERWISE.
- 2. REPLACE, REPAIR AND RESTORE DISTURBED LANDSCAPE AREAS DUE TO GRADING, TRENCHING OR OTHER REASONS TO PRE-CONSTRUCTION CONDITION AND PROVIDE MATERIAL APPROVED BY THE OWNER OR OWNER'S REPRESENTATIVE.
- 3. TOPSOIL SHALL BE AMENDED AS RECOMMENDED BY AN INDEPENDENT SOILS TESTING LABORATORY AND AS OUTLINED IN THE SPECIFICATION.
- 4. PROVIDE ALTERNATE FOR ALL TYPICAL PLANTING AREAS SHALL BE COVERED BY A LAYER OF MEDIUM-GRIND HEMLOCK MULCH TO A DEPTH OF 2 INCHES.
- 5. GC TO PROVIDE SEED MIX AT STORM POND.
- 6. GC TO PROVIDE DESIGN BUILD IRRIGATION AT DENOTED ON PLANS..

PLANT SCHEDULE

| GROUND COVERS | BOTANICAL / COMMON NAME      | SIZE | SPACING | REMARKS                                                                                    |
|---------------|------------------------------|------|---------|--------------------------------------------------------------------------------------------|
| ↓ ↓ ↓         | SEED MIX<br>STORMWATER BLEND | ---  |         | SEEDING RATES AS PURE SEED:<br>BROMUS MARGINATUS - 10 LB/ACRE<br>FESTUCA OVINA - 2 LB/ACRE |

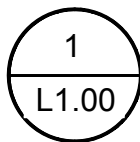
IRRIGATION NOTES

- 1. ALL NEW LANDSCAPE AREAS TO BE IRRIGATED WITH A HIGH EFFICIENCY PERMANENT FULLY AUTOMATIC UNDERGROUND IRRIGATION SYSTEM.
- 2. VALVES SHALL BE WIRED AND INSTALLED PER MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES AND CONNECTED TO THE IRRIGATION CONTROLLER.
- 3. PROVIDE SLEEVING AT ALL AREAS WHERE PIPE TRAVELS UNDER CONCRETE OR HARD SURFACING.
- 4. IRRIGATION SYSTEM AS DESIGNED AND INSTALLED SHALL PERFORM WITHIN THE TOLERANCES AND SPECIFICATIONS OF THE SPECIFIED MANUFACTURERS.
- 5. ALL IRRIGATION PIPE MATERIAL AND INSTALLATION SHALL CONFORM TO APPLICABLE CODE FOR PIPING AND COMPONENT REQUIREMENTS.
- 6. SYSTEM SHALL SUPPLY MANUFACTURER'S SPECIFIED MINIMUM OPERATING PRESSURE TO FARTHEST EMITTER FROM WATER METER.
- 7. IRRIGATION SHALL BE WINTERIZED THROUGH LOW PRESSURE, HIGH VOLUME AIR BLOWOUT CONNECTION THROUGH QUICK COUPLER.
- 8. ZONE STORMWATER AREA SEPARATELY FROM OTHER LANDSCAPE AREAS.
- 9. PROVIDE SHOP DRAWINGS FOR REVIEW PRIOR TO PURCHASE OR INSTALLATION OF SYSTEM. DRAWINGS TO INDICATE HEAD TYPE, GALLONS PER MINUTE, LATERAL LINES, AND BE AT A MINIMUM SCALE OF 1"=20'
- 10. THE IRRIGATION SYSTEM SHALL BE DESIGNED IN A MANNER TO ACCOMMODATE FUTURE EXPANSION.
- 11. CONTRACTOR SHALL VERIFY AVAILABLE GPM/PSI AND ADJUST SYSTEM ACCORDINGLY.
- 12. INSTALL ISOLATION VALVES AT EACH REMOTE CONTROL VALVE.
- 13. CONTRACTOR TO COORDINATE FINAL IRRIGATION CONTROLLER LOCATION WITH OWNER PRIOR TO INSTALLATION.
- 14. REF. CIVIL DETAILS AND DETAILS ON L5.11 FOR POINT OF CONNECTION AND BACKFLOW PREVENTION INFORMATION.
- 15. SEE SHEET L5.11 FOR ALL IRRIGATION DETAILS.



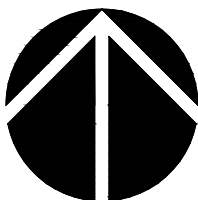
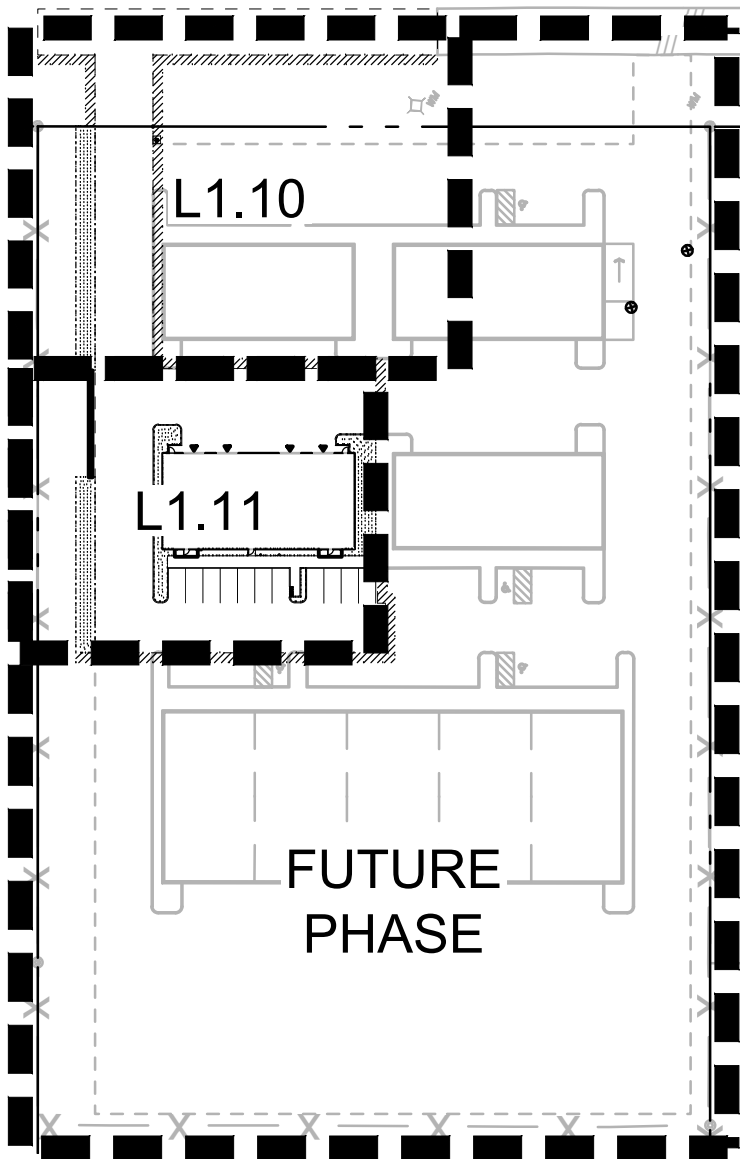
NOTES:

- 1. REMOVE ALL ROCK, DEBRIS AND OTHER FOREIGN MATTER OVER 1" IN DIAMETER FROM TOP 12" OF SOIL.
- 2. RIP AND TILL SUBGRADE TO 6" DEEP (MIN.) PRIOR TO INSTALLING TOPSOIL AND TILL INTERFACE OF SUBGRADE AND TOPSOIL.
- 3. TILL TOPSOIL AND SOIL AMENDMENTS TO A MIN. 12" DEPTH.
- 4. SUBMIT SAMPLE OF MULCH & TOPSOIL FOR ACCEPTANCE PRIOR TO PLACEMENT.



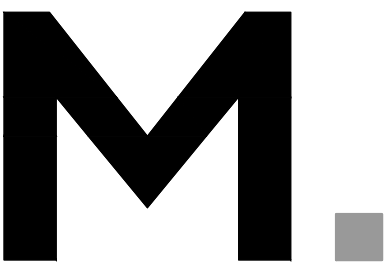
SOIL PREP. DETAIL

SCALE: NTS



KEY MAP

SCALE: NTS



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Client

PORT OF KLICKITAT

154 E BINGEN POINT  
WAY SUITE A, COOK,  
WA 98605

Project

SPECULATIVE  
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| REVISION SCHEDULE |             |            |
|-------------------|-------------|------------|
| Delta             | Issued As   | Issue Date |
| A                 | ADDENDUM #1 | 09/30/2020 |
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NOTES AND  
PLANT  
SCHEDULE

DRAWN BY: ADS

CHECKED BY: SPT

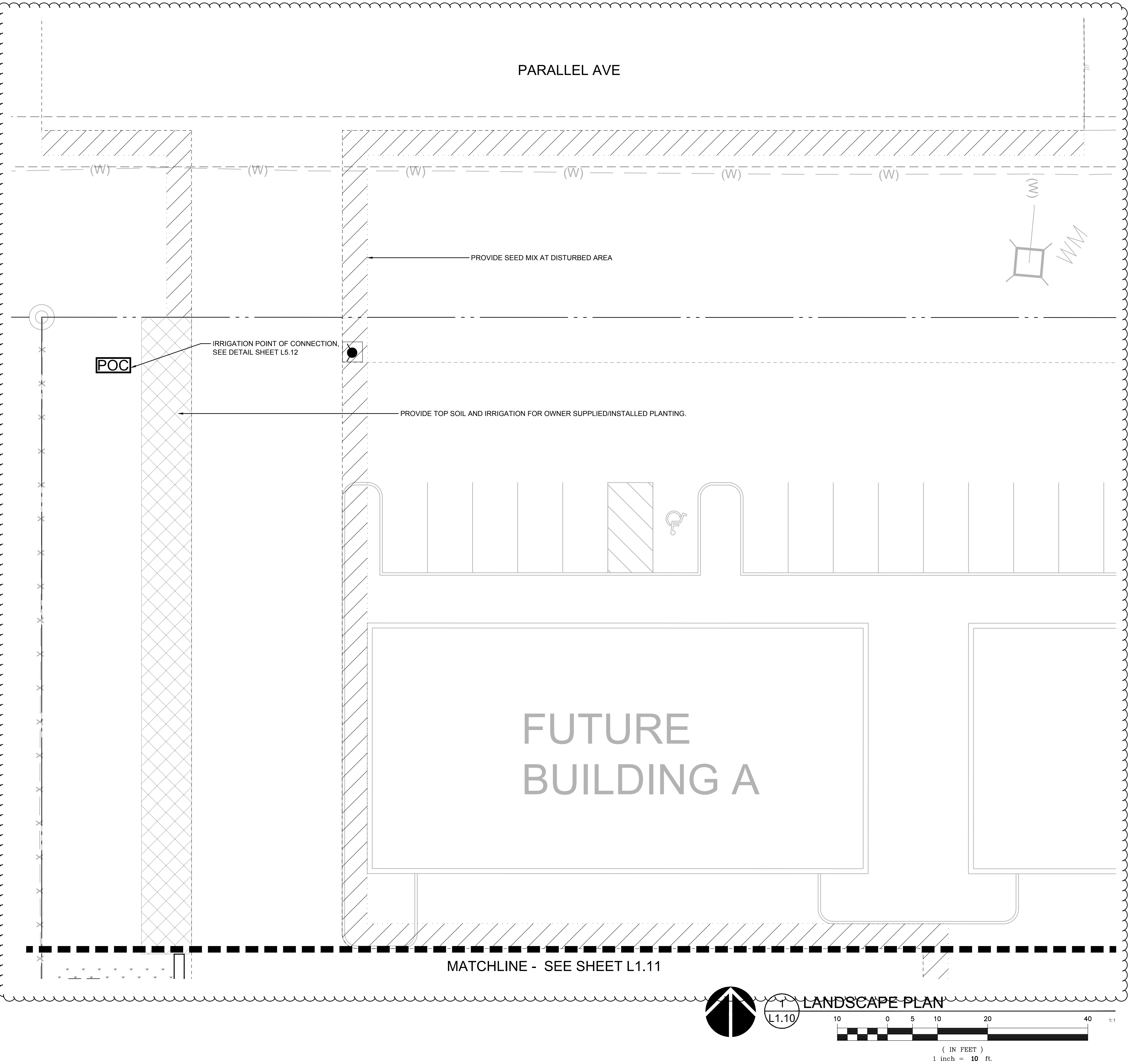
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L1.00

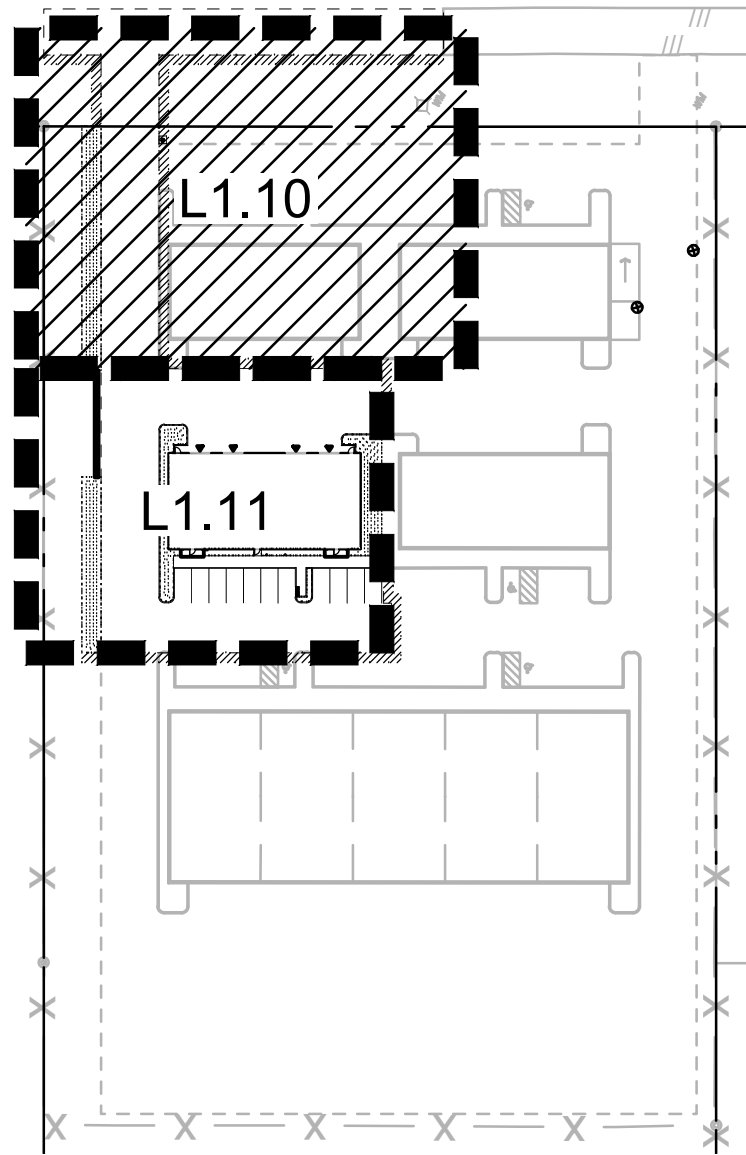
JOB NO. 2190380.01

BID SET - SEPTEMBER 14, 2020





- NOTES
- SEE SHEET L0.01 FOR NOTES AND PLANT SCHEDULE
  - ALL NEW LANDSCAPE AREAS TO RECEIVE PERMANENT IRRIGATION, SEE SHEET L0.01 AND L5.11 FOR ADDITIONAL INFORMATION.



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M.

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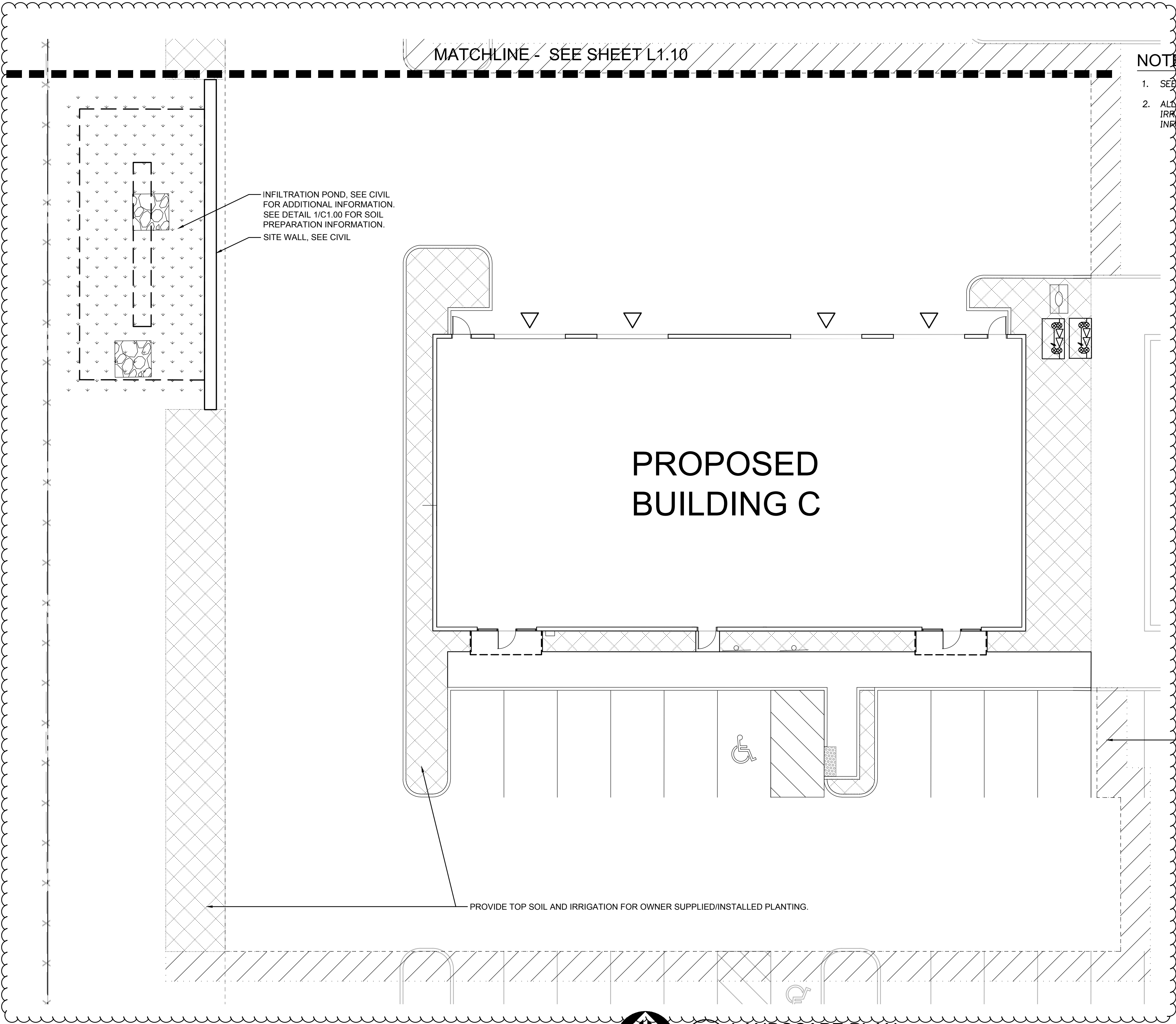
SHEET TITLE:  
LANDSCAPE  
PLAN

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CHECKED BY: SPT  
SHEET:

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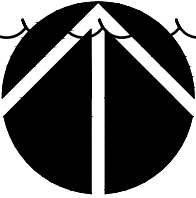
JOB NO.  
2190380.01



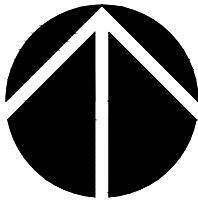
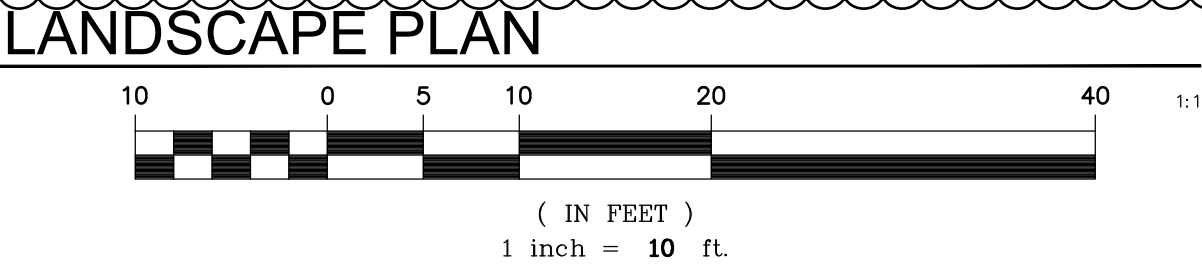


NOTES

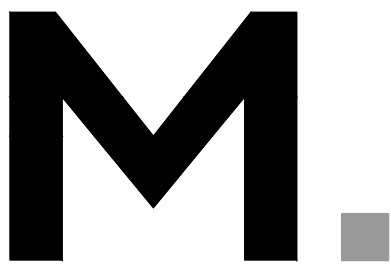
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2. ALL NEW LANDSCAPE AREAS TO RECEIVE PERMANENT IRRIGATION, SEE SHEET L0.01 AND L5.11 FOR ADDITIONAL INFORMATION.



1  
L1.10



KEY MAP  
SCALE: NTS



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SHEET TITLE:  
**LANDSCAPE  
PLAN**

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SHEET:

**L1.11**

JOB NO.  
**2190380.01**

BID SET - SEPTEMBER 14, 2020



| DESIGN CRITERIA                                                                                |  |        |          |
|------------------------------------------------------------------------------------------------|--|--------|----------|
| 1. GOVERNING BUILDING CODE: 2015 INTERNATIONAL BUILDING CODE w/<br>WASHINGTON STATE AMENDMENTS |  |        |          |
| 2. RISK CATEGORY                                                                               |  |        | II       |
| 3. LIVE                                                                                        |  |        |          |
| ROOF                                                                                           |  | 20 PSF |          |
| 4. SNOW                                                                                        |  |        |          |
| GROUND SNOW (Pg)                                                                               |  | 35 PSF |          |
| SLOPED ROOF SNOW (Ps)                                                                          |  | 35 PSF |          |
| IMPORTANCE FACTOR                                                                              |  | 1.0    |          |
| (SNOW BUILD-UP IN ACCORDANCE W/ IBC)                                                           |  |        |          |
| 5. WIND                                                                                        |  |        |          |
| BASIC WIND SPEED (3 SECOND GUST)                                                               |  | 110MPH |          |
| EXPOSURE                                                                                       |  |        | C        |
| 6. SEISMIC                                                                                     |  |        |          |
| 0.2 SEC. SPECTRAL RESPONSE ACCELERATION (Ss)                                                   |  | 0.536  |          |
| 1.0 SEC. SPECTRAL RESPONSE ACCELERATION (S1)                                                   |  | 0.245  |          |
| DESIGN SPECTRAL ACCELERATION (SDS)                                                             |  | 0.490  |          |
| DESIGN SPECTRAL ACCELERATION (SD1)                                                             |  | 0.312  |          |
| SITE CLASSIFICATION                                                                            |  | D      |          |
| SEISMIC DESIGN CATEGORY                                                                        |  | D      |          |
| IMPORTANCE FACTOR                                                                              |  | 1.0    |          |
| SEISMIC FORCE RESISTING SYSTEM (SFRS):                                                         |  |        |          |
| BUILDING:                                                                                      |  |        |          |
| ORDINARY STEEL MOMENT FRAMES                                                                   |  |        |          |
| R                                                                                              |  | 3.5    |          |
| DESIGN RESPONSE COEFFICIENT (Cs)                                                               |  | 0.14   |          |
| BASE SHEAR (V)                                                                                 |  |        | V=Cs * W |
| ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE                                         |  |        |          |

1. THE PROJECT SPECIFICATIONS, DRAWINGS, STANDARD DETAILS, DETAILS IN THE DRAWINGS, AND THE STRUCTURAL NOTES ARE TO BE COMPLEMENTARY, IN THE CASE OF AN INCONSISTENCY NOT CLARIFIED BY THE DESIGNER OF RECORD THE MOST STRINGENT, HIGHEST QUALITY, AND BEST QUALITY PROVISIONS SHALL BE PROVIDED.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE CONSTRUCTION. THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES.
3. DO NOT SCALE DRAWINGS; COORDINATE DIMENSIONS WITH ARCHITECTURAL DRAWINGS.
4. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE LATEST EDITION OF THE INTERNATIONAL BUILDING CODE WITH AMENDMENTS.
5. SEE ARCHITECTURAL DRAWINGS FOR THE FOLLOWING:
  - A. SIZE AND LOCATION OF ALL OPENINGS, EXCEPT AS NOTED.
  - B. SIZE AND LOCATION OF ALL INTERIOR AND EXTERIOR NONBEARING WALLS
  - C. SIZE AND LOCATION OF ALL CONCRETE CURBS, FLOOR DRAINS, SLOPES, DEPRESSED AREAS, CHANGES IN LEVEL, CHAMFERS, GROOVES, INSERTS, ETC.
  - D. SIZE AND LOCATION OF ALL FLOOR AND ROOF OPENINGS, EXCEPT AS SHOWN.
  - E. FLOOR AND ROOF FINISHES
  - F. STAIR FRAMING AND DETAILS, EXCEPT AS SHOWN.
  - G. DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS.
6. SEE MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR THE FOLLOWING:
  - A. PIPE RUNS, SLEEVES, HANGERS, TRENCHES, WALL AND SLAB OPENINGS, ETC., EXCEPT AS SHOWN OR NOTED.
  - B. ELECTRICAL CONDUIT RUNS, BOXES, OUTLETS IN WALLS AND SLABS.
  - C. CONCRETE INSERTS FOR FIXTURES.
  - D. SIZE AND LOCATION OF MACHINE OR EQUIPMENT BASES, ANCHOR BOLTS FOR MOTOR MOUNTS.
  - E. SEISMIC BRACING REQUIREMENTS
7. METHODS, PROCEDURES, AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND ENSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.
8. THE CONTRACTOR SHALL PROVIDE DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR SHALL PROVIDE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE, WORKERS AND VISITORS DURING CONSTRUCTION. SUCH MEASURE SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR CONSTRUCTION LOADS, ETC. VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE REVIEW OF THE ABOVE ITEMS.
9. OPENINGS, POCKETS, ETC. SHALL NOT BE PLACED IN STRUCTURAL ELEMENTS UNLESS SPECIFICALLY DESIGN APPROVED BY THE STRUCTURAL ENGINEER.
10. CONSTRUCTION LOAD (MATERIAL AND EQUIPMENT) SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT. PROVIDE ADEQUATE SHORING AND/ OR BRACING WHERE STRUCTURES HAVE NOT ATTAINED DESIGN STRENGTH.
11. WHEN A DETAIL IS IDENTIFIED, THE CONTRACTOR SHALL APPLY THIS DETAIL IN ESTIMATING AND CONSTRUCTION TO EVERY LIKE CONDITION WHETHER OR NOT THE REFERENCE IS MADE IN EVERY INSTANCE.
12. ANY REFERENCES TO THE RECOMMENDATIONS, GUIDELINES, OR REQUIREMENTS IN NATIONAL PUBLICATIONS, SUCH AS BUT NOT LIMITED TO ASCE, ASTM, IBC, ACI, AISC, NDS, OR AWS, IN THE CONSTRUCTION DOCUMENTS SHALL BE FOLLOWED AS IF THEY ARE MANDATORILY SPECIFIED.

1. THE SUBSURFACE INFORMATION AND FOUNDATION DESIGN ARE BASED ON THE FOLLOWING GEOTECHNICAL REPORT:  
REPORT PREPARED BY ..... **EARTH ENGINEERING, INC.**  
DATED ..... **JUNE 15, 2020**  
..... **(REVISED JULY 6, 2020)**
2. FOUNDATIONS FOR THE STRUCTURE HAVE BEEN DESIGNED USING THE FOLLOWING VALUES:  
LONG-DURATION ALLOWABLE SOIL BEARING ..... **3000 PSF**  
SHORT-DURATION ALLOWABLE SOIL BEARING ..... **4 1/3 (LONG DURATION)**
3. THE CONTRACTOR SHALL PERFORM EXCAVATIONS, FOOTING CONSTRUCTION AND PREPARATION OF THE SUB GRADE UNDER THE SLAB ON GRADE IN ACCORDANCE WITH THE RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL REPORT AND THE PROJECT SPECIFICATIONS.
4. FOUNDATION CONDITIONS NOTED DURING CONSTRUCTION, WHICH DIFFER FROM THOSE DESCRIBED IN THE GEOTECHNICAL REPORT SHALL BE REPORTED TO THE STRUCTURAL ENGINEER AND/OR GEOTECHNICAL ENGINEER BEFORE FURTHER CONSTRUCTION IS ATTEMPTED.
5. CONTRACTOR WILL PROVIDE FOR DE-WATERING OF EXCAVATIONS FROM EITHER SURFACE, GROUND, OR SEEPAGE WATER.
6. ALL ABANDONED FOOTINGS, UTILITIES, ETC., THAT INTERFERE WITH NEW CONSTRUCTION SHALL BE REMOVED.
7. SITE PREPARATION, OVEREXCAVATION/RECOMPACTION OF SOILS, AND THE INSTALLATION OF WALLATION AND FILLATION SHALL BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDATIONS PRESENTED IN THE SOILS REPORT REFERENCED ABOVE.
8. CONTRACTOR SHALL PROVIDE FOR DESIGN AND INSTALLATION OF ALL CRIBBING, SHEATHING, AND SHORING REQUIRED TO SAFELY RETAIN THE EARTH BANKS.

CONCRETE MIXES SHALL BE DESIGNED BY A QUALIFIED TESTING LABORATORY AND REVIEWED BY THE ENGINEER. MIX DESIGNS SHALL BE SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF THE PROJECT.

2. AGGREGATE FOR NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C33. AGGREGATE FOR LIGHTWEIGHT CONCRETE SHALL CONFORM TO ASTM C330. PORTLAND CEMENT SHALL BE TYPE I OR TYPE II AND SHALL CONFORM TO ASTM C150. MINIMUM COARSE AGGREGATE SIZE IS 1/2 INCH (1 1/2" FOR S.O.G.).

3. ADMIXTURES MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER SEALING THE MIX DESIGN. ADMIXTURES USED TO INCREASE THE WORKABILITY OF THE CONCRETE SHALL NOT BE CONSIDERED TO REDUCE THE SPECIFIED MINIMUM CEMENT CONTENT. CALCIUM CHLORIDE SHALL NOT BE USED.

4. COMPRESSIVE STRENGTHS OF CONCRETE AT 28 DAYS SHALL BE AS FOLLOWS:

FOOTINGS SHALL BE 3500 PSI

5. CONCRETE SLUMP SHALL BE 4 INCHES +/- 1 INCH. EXCEPTION: MIX DESIGNED WITH PLASTICISER OR WATER REDUCER.

6. MAXIMUM WEIGHT OF NORMAL-WEIGHT CONCRETE SHALL BE 150 PCF AND MAXIMUM WEIGHT OF LIGHT-WEIGHT CONCRETE SHALL BE 115 PCF.

7. MIXING, TRANSPORTING, AND PLACING OF CONCRETE SHALL CONFORM TO THE LATEST EDITION OF ACI 304R AND PROJECT SPECIFICATIONS. ALL CONCRETE SURFACES AGAINST WHICH CONCRETE IS TO BE PLACED SHALL BE THOROUGHLY CLEANED, CURBED, AND STANDING WATER SHALL BE REMOVED.

8. ALL REINFORCING BARS, WELDED WIRE FABRIC, ANCHOR BOLTS, EMBEDDED PLATES AND OTHER CONCRETE INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE. PROVIDE STANDARD BAR CHAIRS AND SPACERS AS REQUIRED TO MAINTAIN CONCRETE PROTECTION SPECIFIED. "PULLING-UP" WELDED WIRE FABRIC WITH HOOKS DURING CONCRETE PLACEMENT IS NOT PERMITTED.

9. CONCRETE COVER PROTECTION FOR REINFORCEMENT BARS SHALL BE AS FOLLOWS:

(SEE A313/314 SECTION 7.7 FOR CONDITIONAL NOT NEEDED.)

A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3"

B. CONCRETE EXPOSED TO EARTH OR WEATHER:

    BARS #6 AND LARGER 2"

    BARS #5 AND SMALLER 1 1/2"

C. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:

    SLABS, WALLS, JOISTS - #11 BARS AND SMALLER 3/4"

    BEAMS, COLUMNS, TIES, STIRRUPS, SPIRALS 1 1/2"

10. REINFORCING STEEL FOR CONCRETE SHALL BE GRADE 60 OR GRADE 75 SPECIFIED AND SHALL CONFORM TO ASTM A615 OR A706 (GRADE 60 ONLY) FOR WELD TYPE REINFORCING STEEL. REINFORCING BARS SHALL NOT BE TACK WELDED, WELDED, HEATED, OR CUT UNLESS INDICATED ON THE CONTRACT DOCUMENTS OR APPROVED BY THE STRUCTURAL ENGINEER.

11. WELDING REINFORCEMENT BARS, WHEN APPROVED BY THE STRUCTURAL ENGINEER, SHALL CONFORM TO THE AMERICAN WELDING SOCIETY STANDARD D1.4. LATEST EDITION E70XX ELECTRODES SHALL BE USED IN WELDING A706 REINFORCING STEEL.

12. DETAILING OF CONCRETE REINFORCEMENT BARS AND ACCESSORIES SHALL CONFORM TO THE RECOMMENDATIONS OF THE LATEST EDITION OF THE ACI 315 DETAILING MANUAL.

13. GROUT SHALL BE NON-SHRINKABLE GROUT CONFORMING TO ASTM C1107 AND SHALL HAVE A SPECIFIED COMPRESSIVE STRENGTH AT 28 DAYS OF 5000 PSI. PRE GROUTING OF BASE PLATES WILL NOT BE PERMITTED.

14. FORMS FOR CONCRETE SHALL BE LAID OUT AND CONSTRUCTED TO PROVIDE FOR THE REQUIRED CONCRETE SHAPES. DO NOT REMOVE FORMS OR GRADING UNTIL CONCRETE HAS GAINED THE SPECIFIED 28 DAY STRENGTH OR SUFFICIENT STRENGTH TO CARRY ITS OWN WEIGHT AND SUPERIMPOSED LOADS PER THE APPLICABLE PROVISIONS OF ACI 347.

15. CONDUIT OR PIPE SIZE (OD) SHALL NOT EXCEED 30 PERCENT OF SLAB THICKNESS AND SHALL BE PLACED BETWEEN TOP AND BOTTOM REINFORCING, UNLESS SPECIFICALLY DETAILED OTHERWISE. CONCENTRATION OF CONDUITS OR PIPES SHALL BE AVOIDED EXCEPT WHERE DETAILED OPENINGS ARE PROVIDED.

16. PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE PLACING. CORING THROUGH CONCRETE IS NOT PERMITTED EXCEPT WHERE SHOWN. NOTIFY THE STRUCTURAL ENGINEER IN ADVANCE OF CONDITIONS NOT PERMITTED ON THE DRAWINGS.

17. CURE AND PROTECT CONCRETE IMMEDIATELY AFTER PLACEMENT IN ACCORDANCE WITH ACI 308, ACI 305, AND ACI 306. CURING COMPOUNDS USED ON CONCRETE THAT IS TO RECEIVE A RESILIENT TILE FINISH SHALL BE APPROVED BY THE TILE MANUFACTURER BEFORE USE.

18. PROVIDE CONSTRUCTION JOINTS AT THE FOLLOWING LOCATIONS AS SHOWN IN TYPICAL DETAILS SO AS TO DIVIDE SLABS INTO APPROXIMATELY RECTANGULAR AREAS NOT OVER 225 SQUARE FEET WITH A RATIO OF LONG TO SHORT SIDES NOT OVER 1.5 AND SPACING NOT EXCEEDING 15'-0" ON CENTER. IN ADDITION, PROVIDE CONTROL JOINTS OFF OF ALL REINTEGRANT CORNERS TO INTERSECTION OF CONTROL JOINTS BEYOND. PROVIDE CONTROL JOINTS TO CONNECT OFFSET COLUMNS, PITS AND OTHER INTERRUPTIONS TO THE SLAB.

19. AN INDEPENDENT TESTING AGENCY TO PERFORM FIELD QUALITY CONTROL TEST. PROVIDE FREE ACCESS TO CONCRETE OPERATIONS AT PROJECT SITE AND COOPERATE WITH APPOINTED FIRM. SUBMIT PROPOSED MIX DESIGN OF EACH CLASS OF CONCRETE TO INSPECTION AND TESTING FIRM FOR REVIEW PRIOR TO COMMENCEMENT OF CONCRETE OPERATIONS. COMPRESSIVE STRENGTH TESTS: ASTM C39/C39M. FOR EACH TEST, MOLD, AND CURE THREE CONCRETE TEST CYLINDERS. OBTAIN TEST SAMPLES FOR EVERY 100 CU YD OR LESS OF EACH CLASS OF CONCRETE PLACED. TAKE ONE ADDITIONAL THREE TEST CYLINDERS DURING COLD & HOT WEATHER CONCRETING AS DEFINED BY ACI 305 AND ACI 306. CURED CONCRETE SAMPLES FOR COMPRESSIVE STRENGTH TESTS SHALL BE TAKEN IN ACCORDANCE WITH TEST FOR EACH SET OF TEST CYLINDERS TAKEN. FOLLOWING PROCEDURES OF ASTM C143/C143M, PERFORM ONE AIR CONTENT TEST FOR EACH SET OF COMPRESSIVE STRENGTH SPECIMENS, COMPLYING ASTM C231.

20. WHERE INDICATED ON THE DRAWINGS, INTENTIONALLY ROUGHENED CONCRETE SHALL BE CLEAN AND FREE OF LAITANCE AND ROUGHENED TO A FULL AMPLITUDE OF 1/4".

1. GENERAL DESIGN REQUIREMENTS: COMPLY WITH THE LATEST EDITION OF THE IBC, THE AISC, "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS," AND THE METAL BUILDING MANUFACTURERS ASSOCIATION "RECOMMENDED GUIDE SPECIFICATIONS FOR PRE-ENGINEERED METAL BUILDINGS" AND "DESIGN PRACTICES MANUAL" AND "LOW RISE BUILDING SYSTEMS MANUAL."

2. DESIGN LOADS - DESIGN THE BUILDING IN CONFORMANCE WITH THE LATEST EDITION OF THE IBC WITH THE FOLLOWING LOAD CRITERIA:

ROOF:

|                                        |        |   |
|----------------------------------------|--------|---|
| SNOW (IN ACCORDANCE W/ IBC 2015) ..... | 35 PSF | B |
| COLLATERAL .....                       | 5 PSF  |   |

WIND:

|                                       |         |
|---------------------------------------|---------|
| BASIC WIND SPEED ((3) SEC GUST) ..... | 110 MPH |
| EXPOSURE .....                        | C       |
| IMPORTANCE FACTOR .....               | 1.0     |

SEISMIC:

|                                                                 |       |
|-----------------------------------------------------------------|-------|
| 1.0 SEC. SPECTRAL RESPONSE ACCELERATION (S1) .....              | 0.536 |
| 0.2 SEC. SPECTRAL RESPONSE ACCELERATION (S <sub>0</sub> ) ..... | 0.245 |
| IMPORTANCE FACTOR .....                                         | 1.0   |
| SITE CLASSIFICATION .....                                       | D     |
| BUILDING TYPE R - ORDINARY STEEL MOMENT FRAMES .....            | 3.5   |

3. THE DRIFT OF PRIMARY FRAMES TO BE LIMITED TO L/40 FOR THE SUPPORT OF NON-RIGID ROOF & WALL SYSTEMS, FOR RIGID EXTERIOR WALL SYSTEMS, SUCH AS CONCRETE TILT PANEL OR BRICK VENEER, THE DRIFT OF PRIMARY RIGID FRAMES IS TO BE COMPATIBLE WITH THE RIGIDITY OF THE WALL SYSTEMS.

4. CONSIDER THE BASES OF MOMENT FRAMES AS PINNED. CALCULATIONS FOR DEFLECTIONS SHALL BE DONE USING ON THE BARE FRAME METHOD. REDUCTION BASED ON ENGINEERING JUDGMENT USING THE ASSUMED COMPOSITE STIFFNESS OF THE BUILDING ENVELOPE SHALL NOT BE PERMITTED.

1. ALL SECTION SHAPES SHALL CONFORM TO ASTM A992. CHANNEL SHAPES AND PLATES SHALL CONFORM TO ASTM A36. (UNLESS OTHERWISE NOTED ON THE DWG).
2. STRUCTURAL STEEL PIPE SHALL CONFORM TO ASTM A53, GRADE B, (FY = 35 KSI). MILL TEST REPORTS FOR STEEL PIPE SHALL BE SUBMITTED TO THE ARCHITECT.
3. HOLLOW STRUCTURAL SECTIONS SHALL CONFORM TO ASTM A500, GRADE B, (FY = 46 KSI).
4. ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 GR 36, UNLESS NOTED OTHERWISE.
5. STRUCTURAL STEEL DETAILING, FABRICATION AND ERECTION SHALL CONFORM TO THE LATEST EDITION OF AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" WITH AMENDMENTS, AND THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES," WITH AMENDMENTS.
6. BUCKLING-RESTRAINED BRACED FRAMES SHALL CONFORM TO THE REQUIREMENTS OF AISC 341, SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS AS WELL AS THE DESIGN PARAMETERS SET FORTH IN THE DRAWINGS. STRUCTURAL CALCULATIONS AND DETAILS FOR THE BRB CONNECTIONS SHALL BE PROVIDED BY A PROFESSIONAL ENGINEER. THE CONTRACTOR SHALL SUBMIT PROJECTS TO ARCHITECT/ENGINEER BEFORE SUBMITTING TO JURISDICTION FOR REVIEW AND PERMITTING.
7. BOLTS 3/4"Ø AND GREATER TO BE ASTM A325 OR ASTM F1852, TYPE 1 (TWIST - OFF TENSION CONTROL BOLTS) WITH THREADS INCLUDED IN SHEAR PLANE, INSTALLED PER SECTION 8, MINIMUM PRETENSION AS STATED IN TABLE 8.1 AND INSPECTED PER SECTION 9 OF THE RCSC SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS. PROVIDE ASTM A490 BOLTS OR ASTM F2280 TWIST-OFF TENSION CONTROL BOLTS WHERE ASTM A490 BOLTS ARE INDICATED ON PLANS OR DETAILS. CONNECTION TYPE IS PRE-TENSIONED UNLESS NOTED OTHERWISE BOLTS NOTED AS TYPE 3C (SLIP-CRITICAL) IN DETAILS SHALL BE INSTALLED AS SLIP-CRITICAL WITH FINISH SURFACES PREPARED AS CLASS A SURFACE PER AISC 360. FOR BOLTS LESS THAN 3/4"Ø USE A307.
8. SPLICING OF STRUCTURAL STEEL MEMBERS WHERE NOT DETAILED ON THE CONTRACT DOCUMENTS IS PROHIBITED WITHOUT THE PRIOR APPROVAL OF THE STRUCTURAL ENGINEER AS TO LOCATION, TYPE OF SPlice AND CONNECTION TO BE MADE.
9. HEADED CONCRETE ANCHORS SHALL BE NELSON HEADED CONCRETE ANCHORS (OR APPROVED EQUAL), AND SHALL CONFORM TO ASTM A108. ANCHORS SHALL BE AUTOMATICALLY END WELDED WITH SUITABLE STUD WELDING EQUIPMENT IN THE SHOP OR IN THE FIELD. WELDING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE NELSON STUD WELDING COMPANY.
10. DEFORMED BAR ANCHORS (DBA) SHALL BE NELSON DEFORMED BAR ANCHORS (OR APPROVED EQUAL), AND SHALL BE MADE FROM LOW CARBON STEEL CONFORMING TO ASTM A496. ANCHORS SHALL BE AUTOMATICALLY END- WELDED WITH SUITABLE WELDING EQUIPMENT IN THE SHOP OR IN THE FIELD. WELDING SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE NELSON STUD WELDING COMPANY.
11. WELDS USED IN MEMBERS & CONNECTIONS DESIGNATED IN THE DRAWINGS AS SEISMIC FORCE RESISTING SYSTEM (SFRS) SHALL BE MADE WITH FILLER METALS MEETING THE REQUIREMENTS IN AWS D1.8 SECTION 6.3 (AISC 341.0 SECTION 4.3.4a&b). WELDS USED IN MEMBERS & CONNECTIONS DESIGNATED IN THE DRAWINGS AS DEMAND CRITICAL (DC) SHALL BE MADE WITH FILLER METALS MEETING THE REQUIREMENTS IN AWS D1.8 SECTION 6.3 (AISC 341.0 SECTION 4.3.4a&b). WELDS USED IN MEMBERS & CONNECTIONS DESIGNATED IN THE DRAWINGS AS DEMAND CRITICAL (DC) SHALL BE MADE WITH FILLER METALS MEETING THE REQUIREMENTS IN AWS D1.8 SECTION 6.3 (AISC 341.0 SECTION 4.3.4a&b).
12. SUBMIT A WELDING PROCEDURE IN ACCORDANCE WITH LATEST EDITION OF AWS D1.1. WHERE WELDS ARE FOR MEMBERS DESIGNATED PART OF THE SFRS OR LABELED DEMAND CRITICAL, WELDING PROCEDURES SHALL CONFORM TO AWS D1.8 AND MANUFACTURER'S RECOMMENDATIONS (WHERE APPLICABLE). APPROVED PROCEDURES TO BE SUBMITTED TO SPECIAL INSPECTOR FOR REVIEW AND APPROVAL THEN TO THE ENGINEER FOR REVIEW.
13. SEE FRAME ELEVATIONS FOR LOCATION OF PROTECTED ZONES FOR LATERAL RESISTIVE FRAMES. NO CONNECTIONS OR ATTACHMENTS ARE PERMITTED WITHIN PROTECTED ZONES.
14. LOW VOLTAGE ANTICIPATED SERVICE VOLTAGE (LAST) SHALL BE 60° F FOR INDOOR CONDITIONED STRUCTURES & 0° F FOR OUTDOOR/UNCONDITIONED STRUCTURES
15. ALL EXTERIOR STEEL TO BE GALVANIZED. PLUG GALV HOLES w/ ALUMINUM PLUGS.
16. HEADED SHEAR CONNECTORS STUDS ON COMPOSITE STEEL BEAMS SHALL BE UNIFORMLY SPACED U.O.N. DO NOT USE MORE THAN ONE STUD PER RIB WHERE THE NUMBER OF STUDS REQUIRED IS LESS THAN OR EQUAL TO THE NUMBER OF RIBS AVAILABLE. PLACE A MINIMUM OF ONE STUD PER RIB FULL LENGTH OF THE BEAM. PLACE ADDED STUDS IN EACH RIB BEGINNING AT THE SUPPORTS AT EACH AND MOVING TOWARDS THE MID-SPAN UNTIL REQUIRED NUMBER OF STUDS IS SUPPLIED. FOR MULTIPLE STUDS TRANSVERSE TO THE LONGITUDINAL AXIS OF THE BEAM, THE MINIMUM STUD SPACING TO BE 3" OC AND 1" MINIMUM CLEAR FROM THE END EDGE. SUBMIT SHOP DRAWINGS FOR REVIEW PRIOR TO THE INSTALLATION OF THE HEADED STUDS.
17. OPEN WEB STEEL JOISTS & JOIST GIRDERS WITH THEIR BRIDGING, BRACING, END SUPPORTS AND ANCHORAGE, AND ERECTION STABILITY AND HANDLING REQUIREMENTS SHALL CONFORM TO THE APPLICABLE STEEL JOIST INSTITUTE STANDARD SPECIFICATIONS FOR STEEL JOISTS AND JOIST GIRDERS, LATEST EDITION. TOP CHORDS OF JOISTS AND JOIST GIRDERS SHALL CONSIST OF ANGLES OR TEES.
18. SUBMIT ERECTION DRAWINGS AND CALCULATIONS (BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE SUBJECT OF THE DESIGN) FOR THE STEEL JOISTS AND JOIST GIRDERS, PER AISC 308. THE CONTRACTOR SHALL PROVIDE EVIDENCE OF COMPLIANCE FROM THE MANUFACTURER PER SECTION 2207 OF THE IBC. APPROVED ERECTION DRAWINGS AND CALCULATIONS ARE TO BE SUBMITTED TO JURISDICTION FOR REVIEW AND PERMITTING. CONTRACTOR TO COORDINATE ALL MECHANICAL, ELECTRICAL, PLUMBING, AND SPRINKLER LOADS WITH THE JOIST DESIGNER.
19. WELDS SHALL CONFORM TO AWS SPECIFICATIONS. WELDERS SHALL BE CERTIFIED UNDER AWS SPECIFICATIONS. E70xx ELECTRODES SHALL BE USED FOR ALL WELDS.

POST-INSTALLED ANCHOR SYSTEMS SHALL COMPLY WITH THE LATEST REVISION OF ICC-ES ACCEPTANCE CRITERIA AND HAVE A VALID ICC-ES REPORT (OR APPROVED EQUIVALENT) IN ACCORDANCE WITH THE APPLICABLE BUILDING CODE.

2. UNLESS OTHERWISE NOTED ON THE DRAWINGS USE ANCHORS LISTED BELOW:

- EXPANSION ANCHORS IN CONCRETE SHALL BE ONE OF THE FOLLOWING:
  - HILTI HSL-C3 CARBON STEEL HIGH DUTY EXPANSION ANCHOR (ICC-ES REPORT SR-1545)
  - HILTI HDA CARBON AND STAINLESS STEEL UNDERCUT ANCHOR (ICC-ES REPORT ESR-1546)
  - HILTI KWIK BOLT TZ CARBON AND STAINLESS STEEL ANCHORS (ICC-ES REPORT ESR-1917)
  - DeWALT POWER-STUD+SD2 ANCHOR (ICC-ES REPORT ESR-2502)
  - SIMPSON STRONG-TIE STRONG-BOLT 2 ANCHOR (ICC-ES REPORT ESR-3037)
- ADHESIVE ANCHORS IN CONCRETE SHALL BE ONE OF THE FOLLOWING:
  - HILTI HIT-RE 500 V3 ADHESIVE ANCHOR (ICC-ES REPORT ESR-3814)
  - HILTI HIT-HY 200 ADHESIVE ANCHOR (ICC-ES REPORT ESR-3187)
  - DeWALT PURE 110+ EPOXY ADHESIVE ANCHOR (ICC-ES REPORT ESR-3298)
  - DeWALT AC208+ ADHESIVE ANCHOR (ICC-ES REPORT ESR-4027)
  - SIMPSON STRONG-TIE SET-XP EPOXY ADHESIVE ANCHOR (ICC-ES REPORT ESR-2508)
  - SIMPSON STRONG-TIE AT-XP EPOXY ADHESIVE ANCHOR (APMO UES ER-263)
- SCREW ANCHORS IN CONCRETE SHALL BE ONE OF THE FOLLOWING:
  - DeWALT SCREW-BOLT+ SCREW ANCHOR (ICC-ES REPORT ESR-3889)
  - HILTI KWIK HUS-EZ SCREW ANCHOR (ICC-ES REPORT ESR-3027)
  - SIMPSON STRONG-TIE TITEN HD SCREW ANCHOR (ICC-ES REPORT ESR-2713)
- ANCHORS IN CONCRETE OVER STEEL DECK SHALL BE ONE OF THE FOLLOWING:
  - HILTI KWIK BOLT 3 CARBON AND STAINLESS STEEL ADHESIVE ANCHOR (ICC-ES REPORT ESR-1917)
  - HILTI HIT-RE 500 V3 ADHESIVE ANCHORS (ICC-ES REPORT ESR-3814)
  - DeWALT POWER-STUD+SD2 EXPANSION ANCHOR (ICC-ES REPORT ESR-2502)
  - DeWALT POWER-STUD+SD1 EXPANSION ANCHOR (ISS-ES REPORT ESR-2818)
  - DeWALT SCREW-BOLT+ SCREW ANCHOR (ICC-ES REPORT ESR-3889)
  - SIMPSON STRONG-TIE STRONG-BOLT 2 WEDGE ANCHOR (ICC-ES REPORT ESR-3037)
  - SIMPSON STRONG-TIE TITEN HD SCREW ANCHOR (ICC-ES REPORT ESR-2713)
- EXPANSION ANCHORS IN MASONRY SHALL BE ONE OF THE FOLLOWING:
  - HILTI KWIK BOLT 3 (KB3) ANCHORS (ICC-ES ESR-1385)
  - DeWALT POWER-STUD+SD1 (ICC-ES ESR-2518)
  - SIMPSON STRONG-TIE WEDGE-ALL ANCHOR (ICC-ES REPORT ESR-1396)
  - SIMPSON STRONG-TIE STRONG-BOLT 2 WEDGE ANCHOR (APMO UES ER-240)
- ADHESIVE ANCHORS IN MASONRY SHALL BE ONE OF THE FOLLOWING:
  - HILTI HIT-HY 70 ADHESIVE ANCHOR (ICC-ES REPORT ESR-2682)
  - DeWALT AC100+ GOLD ADHESIVE ANCHOR (ICC-ES REPORT ESR-3200 FOR CMU & ICC-ES REPORT ESR-4105 FOR UNREINFORCED MASONRY)
  - SIMPSON STRONG-TIE SET XP ADHESIVE ANCHOR (ICC-ES REPORT ESR-1772)
  - SIMPSON STRONG-TIE SET-XP EPOXY ADHESIVE ANCHOR (APMO UES ER-265)
  - SIMPSON STRONG-TIE AT-XP EPOXY ADHESIVE ANCHOR (APMO UES ER-281)
- SCREW ANCHORS IN MASONRY SHALL BE ONE OF THE FOLLOWING:
  - HILTI KWIK HUS-EZ SCREW ANCHOR (ICC-ES REPORT ESR-3056)
  - DeWALT SCREW-BOLT+ SCREW ANCHOR (ICC-ES REPORT ESR-4042)
  - SIMPSON STRONG-TIE TITEN HD SCREW ANCHOR (ICC-ES REPORT ESR-1056)

3. ANCHORS INSTALLED IN THE BOTTOM OF CONCRETE OVER STEEL DECK SHALL BE INSTALLED IN THE BOTTOM FLUTE ONLY.

4. ANCHORS ARE NOT TO BE INSTALLED UNTIL CONCRETE HAS REACHED ITS DESIGN STRENGTH.

5. FOR EMBEDMENT SET DETAILS, SEE THE REBAR DETAIL. USE EMBEDMENT RECOMMENDED BY MANUFACTURER WHERE NO EMBEDMENT IS SHOWN.

6. MANUFACTURER'S INSTALLATION TRAINING AND CERTIFICATION IS REQUIRED ON ALL POST-INSTALLED ANCHORS FOR ANCHOR INSTALLER.

7. CONTRACTOR COORDINATE ANCHOR AND REINFORCING LOCATION. IT IS UNACCEPTABLE TO CUT REBAR FOR POST INSTALLED ANCHORS WITHOUT PRIOR APPROVAL FROM A&E.

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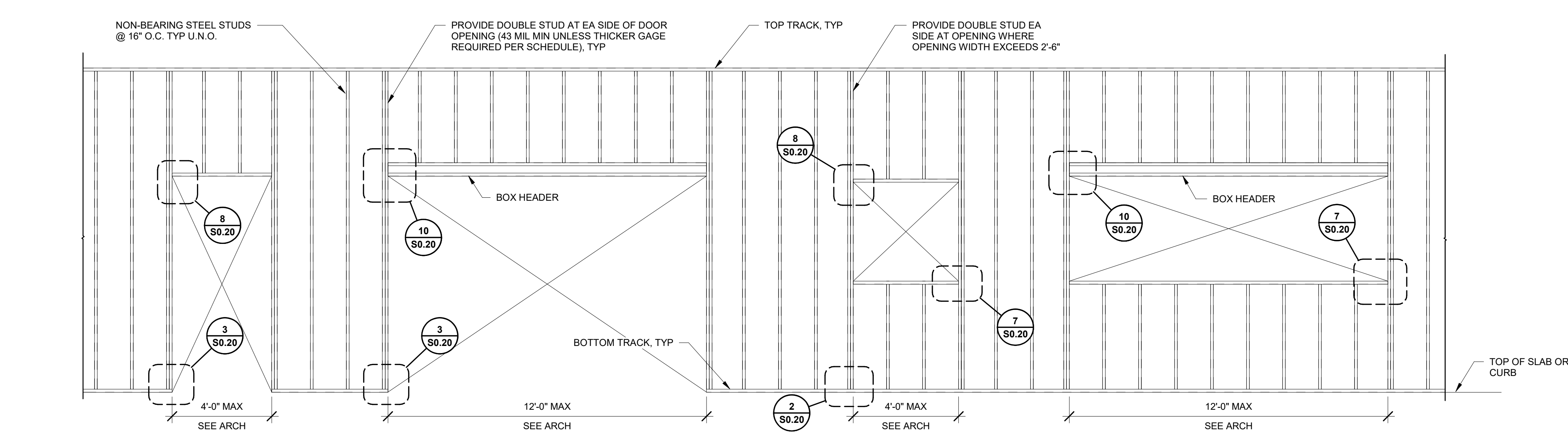
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JOB NO. **2190380.00**

C:\Users\lbtm\Documents\Revit Projects\2190380.00 - POK\380-POK-v20-L.rvt 9/10/2020 12:48:35 PM 12" = 1'-0"





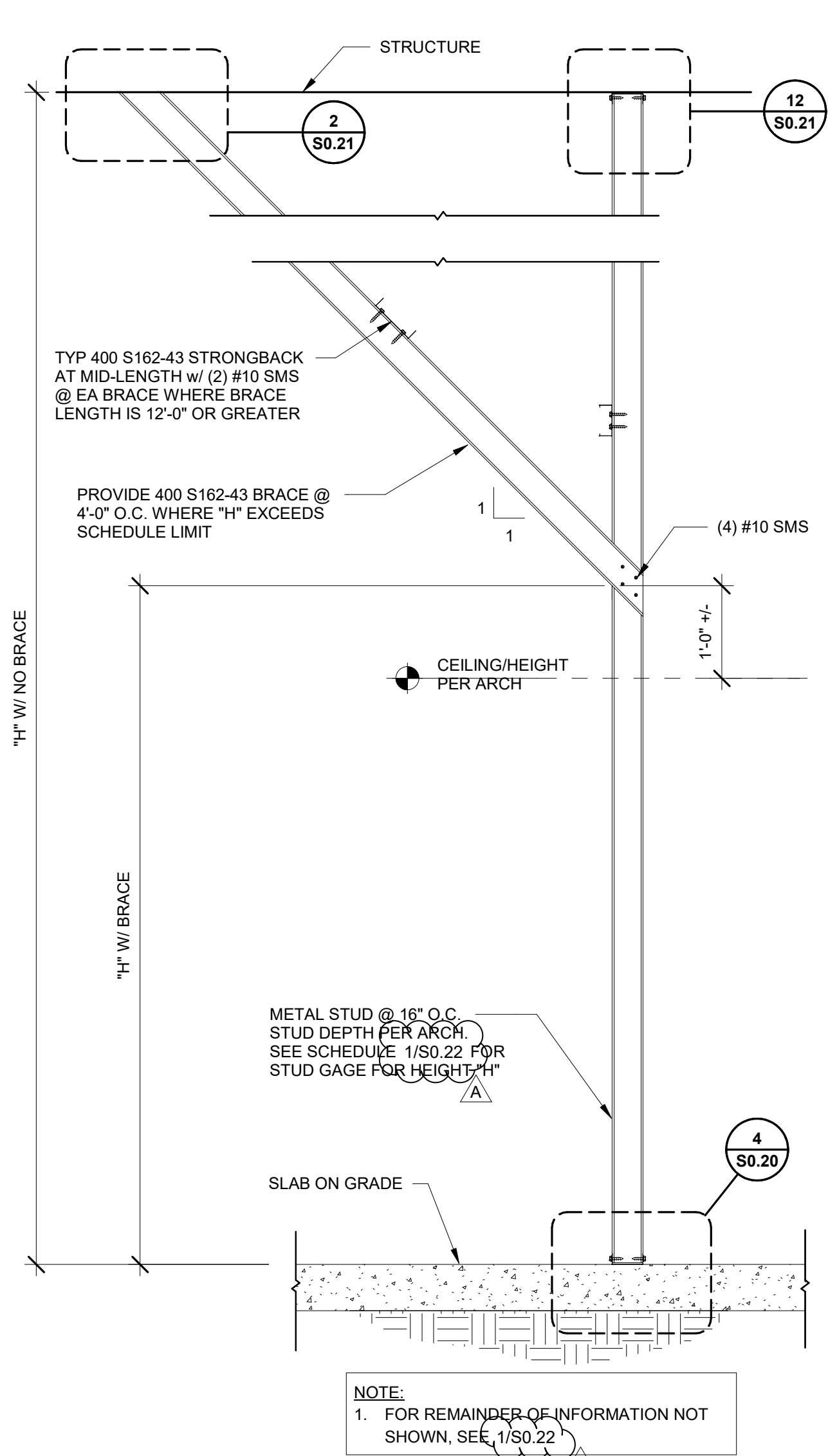
1  
S0.22  
TYP NON-BEARING STUD WALL FRAMING  
3/8" = 1'-0"

| STEEL STUD SIZE |        |        |        |        |
|-----------------|--------|--------|--------|--------|
| GAUGE           | H      |        |        |        |
|                 | 3 5/8" | 4"     | 6"     | 8"     |
| 14 (68 MIL)     | 19'-9" | 21'-3" | 29'-9" | 30'-0" |
| 16 (54 MIL)     | 18'-6" | 20'-0" | 27'-9" | 30'-0" |
| 18 (43 MIL)     | 17'-3" | 18'-9" | 26'-0" | 30'-0" |
| 21 (33 MIL)     | 15'-9" | 17'-0" | 23'-6" | --     |

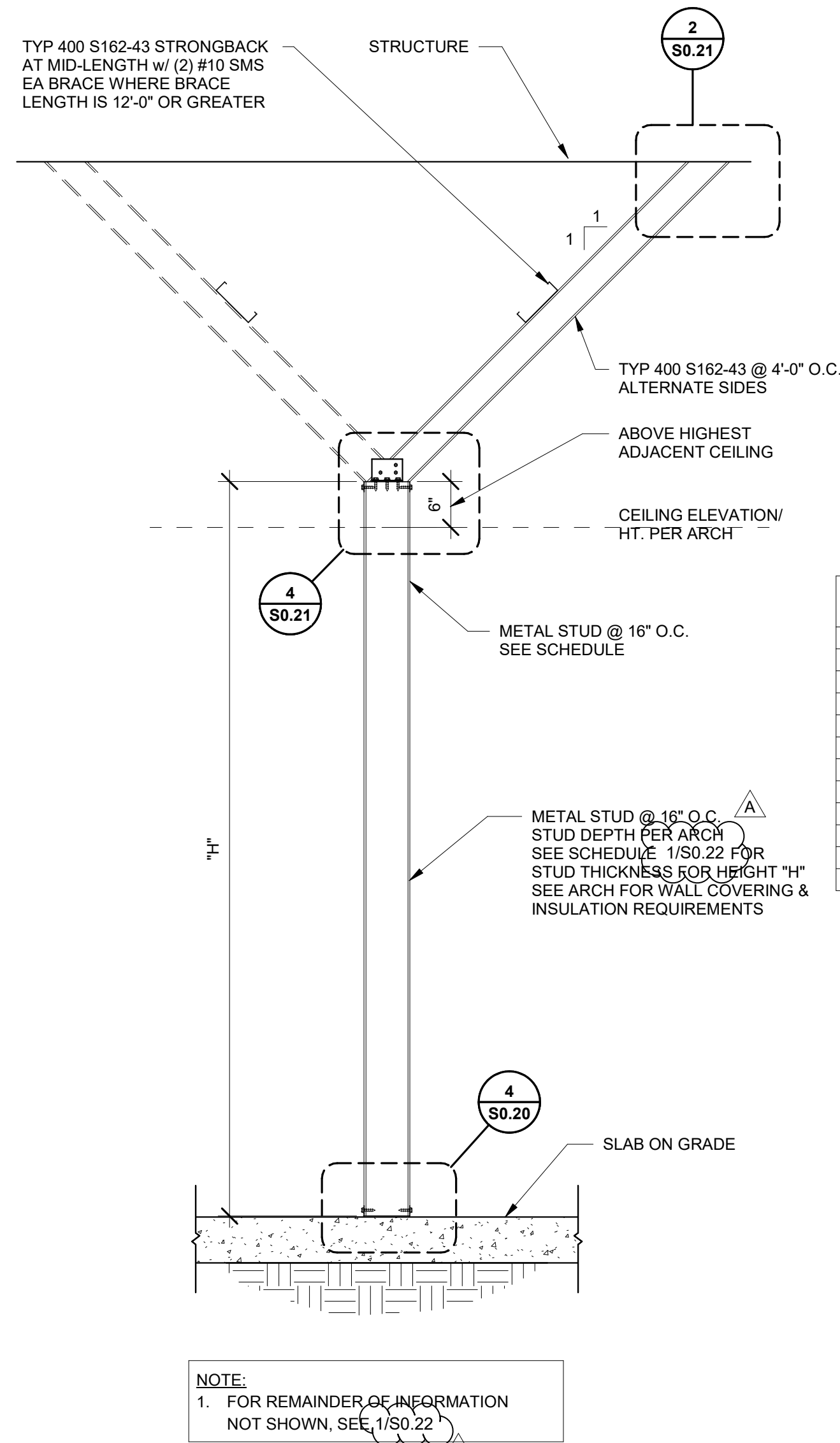
- NOTES:
- STEEL STUDS SHALL CONFORM TO ICC-ER #3064P OR APPROVED EQUAL.
  - MAXIMUM STUD HEIGHT "H" FOR STUDS @ 16" O.C.
  - STEEL STUDS SHALL HAVE 1 1/4" FLANGE MIN.
  - PROVIDE BRIDGING PER 2/S0.20 OR PER MANUFACTURER WHERE GYPSUM BOARD IS NOT APPLIED TO BOTH SURFACES.
  - SEE ARCHITECTURAL DRAWINGS FOR OTHER CONDITIONS.

| JAMB SCHEDULE    |                 |
|------------------|-----------------|
| OPENING SIZE     | # OF JAMB STUDS |
| 4'-0" TO 6'-0"   | 2               |
| 6'-0" TO 10'-0"  | 2               |
| 10'-0" TO 12'-0" | 3               |

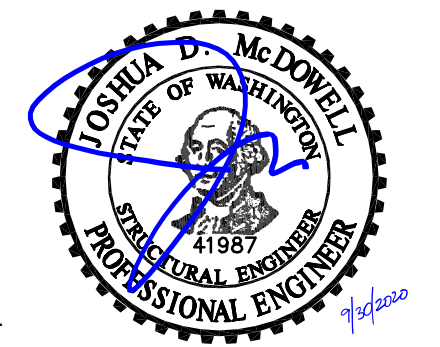
- NOTES:
- JAMB STUDS TO MATCH SIZE & GAGE OF TYP STUDS
  - SEE 11/S0.21 FOR JAMB STUD TO STUD CONNECTION



11  
S0.22  
TYPICAL FULL HEIGHT PARTITION WALL  
3/4" = 1'-0"

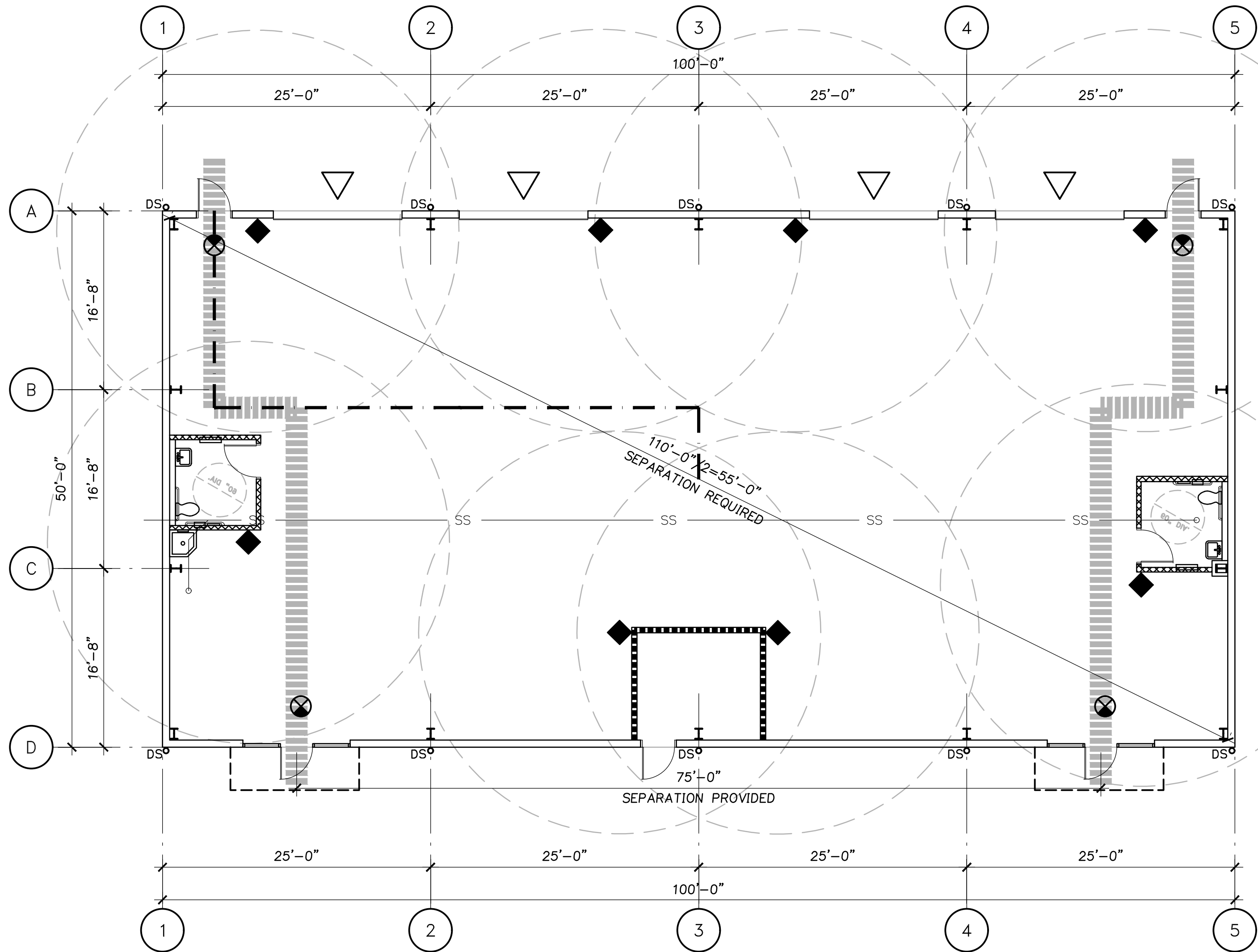


12  
S0.22  
PARTIAL-HEIGHT PARTITION WALL  
3/4" = 1'-0"



| REVISION SCHEDULE |             |            |
|-------------------|-------------|------------|
| Delta             | Issued As   | Issue Date |
| A                 | ADDENDUM #1 | 09/30/2020 |
|                   |             |            |
|                   |             |            |
|                   |             |            |
|                   |             |            |
|                   |             |            |
|                   |             |            |
|                   |             |            |
|                   |             |            |





1

G1.10

1/8"=1'-0"

CODE ANALYSIS FLOOR PLAN

ENERGY CODE  
2015 WASHINGTON STATE ENERGY CODE - COMMERCIAL  
CLIMATE ZONE: COLD 5B (TABLE C301.1)  
MAX LIGHTING POWER DENSITY: 0.5 W/SQ FT PER C402.3.2  
HEATING SYSTEM OUTPUT: NOT GREATER THAN 8 BTU/(H-SQ. FT.) PER C402.1.4

|                  | REQUIRED<br>R-VALUE | PROVIDED<br>R-VALUE | MAX.<br>U-FACTOR | MAX.<br>SHGC       |
|------------------|---------------------|---------------------|------------------|--------------------|
| WINDOW           | -                   | -                   | 0.38             | SEW 0.40<br>N 0.53 |
| SWINGING DOORS   | -                   | -                   | 0.37             |                    |
| NON SWINGING DRS | R-4.75              | -                   | 0.34             |                    |
| METAL BLDG WALLS | R-19 CI             | -                   | -                | -                  |
| FRAMED WALLS     | R-13+R-10 CI        | -                   | -                | -                  |
| ROOF             | R-25 + R-11 LS      | -                   |                  |                    |
| SLAB ON GRADE    | R-10 FOR 24" BLW    | -                   | 0.60             | 0.40               |

CI = CONTINUOUS INSULATION  
1. MINIMUM HAZE 97.9%  
2. EXTEND R-10 CLOSED CELL RIGID INSULATION AT PERIMETER FROM BOTTOM OF SLAB FOR 2'-0" VERTICALLY OR TO TOP OF FOOTING

ADDITIONAL INFORMATION:  
A. VERTICAL FENESTRATION AREA:  
B. CONTINUOUS AIR BARRIER SHALL BE PROVIDED THROUGHOUT BUILDING ENVELOPE, PER C402.5.6  
B.A. METAL ROOF DECK  
B.B. METAL WALL PANELS W/SEALED JOINTS  
C. ALL PENETRATIONS OF THE AIR BARRIER MUST BE SEALED PER C402.5.1.1  
D. VESTIBULE NOT REQUIRED, MAINE ENTRY LESS THAN 3,000 SF CXXX  
E. INSULATION SHALL BE MARKED IN A MANNER THAT WILL ALLOW A DETERMINATION OF COMPLIANCE WITH THE APPLICABLE PROVISIONS OF THIS CODE PER 303.1  
F. FENESTRATION SHALL BE MARKED WITH U-FACTOR, SOLAR HEAT GAIN COEFFICIENT, VISIBLE TRANSMITTANCE AND LEAKAGE RATING PER C303.1.3  
G. TO COMPLY WITH ADDITIONAL EFFICIENCY PACKAGE OPTION, INDICATE IN PROJECT DOCUMENTS THAT THE AIR BARRIER RESULTS SHALL NOT EXCEED 0.25 CFM/SF AT 0.3 IN WG. INDICATE AIR BARRIER TEST REPORT SHALL BE SUBMITTED TO THE JURISDICTION AND BUILDING OWNER ONCE TEST IS COMPLETED  
H. SEMI HEATED BUILDING: PROVIDE FREEZE PROTECTION TO HEAT BUT NOT COOL BUILDING WITH MAXIMUM HEATING SYSTEM OUTPUT CAPACITY OF 3.4 BTU/(H-SQ FT) BUT NOT GREATER THAN 8 BTU/(H-SQ FT)  
I. PROJECT CLOSE OUT DOCUMENTATION IS REQUIRED INCLUDING APPLICABLE WSEC ENVELOPE COMPLIANCE FORMS AND CALCULATIONS, AND FENESTRATION NFRC RATING CERTIFICATES

CODE ANALYSIS

BASED ON 2015 IBC WITH WASHINGTON STATE AMENDMENTS

CONSTRUCTION TYPE: (I-B) **A**  
ONE STORY  
FIRE PROTECTION: NOT REQUIRED  
FUTURE OCCUPANCY: S-1 (STORAGE), F-1 (INDUSTRIAL), B (OFFICE)

THE BUILDING AREA HAS BEEN CALCULATED BASED ON NON-SEPARATED USES (SECTION 302.3.1).

| AREA                                                                               | SQUARE FEET | OCCUPANCY                                |
|------------------------------------------------------------------------------------|-------------|------------------------------------------|
| FIRST FLOOR                                                                        | 5,000 SF    | S-1, S-2, F-1, F-2, B                    |
| TOTAL FIRST FLOOR                                                                  | 5,000 SF    |                                          |
| ALLOWABLE FLOOR AREA:<br>SEE ALLOWABLE AREA CALCULATIONS<br>BASED ON F-1 OCCUPANCY | 15,500 SF   | BASED ON F-1 OCCUPANCY II-B CONSTRUCTION |

| FIRE RESISTIVE RATING<br>BASED ON FIRE SEPARATION (TABLE 602)                          |                  |
|----------------------------------------------------------------------------------------|------------------|
| ≥ 30'                                                                                  | 0                |
| BUILDING HEIGHT (F-1 OCCUPANCY, TYPE II-B CONSTRUCTION)<br>ALLOWABLE: 55'-0"/2 STORIES |                  |
| PROVIDED:                                                                              | 24'-0"/1 STORIES |
| BUILDING<br>FIRE RESISTIVE REQUIREMENTS (TABLE 601)                                    |                  |
| EXTERIOR BEARING WALLS                                                                 | NR               |
| EXTERIOR NON-BEARING WALLS                                                             | NR               |
| INTERIOR NON-BEARING WALLS                                                             | NR               |
| STRUCTURAL FRAME                                                                       | NR               |
| ROOF                                                                                   | NR               |

| BUILDING<br>FIRE PROTECTION SYSTEMS (CHPT 9) |                                |
|----------------------------------------------|--------------------------------|
| SMOKEVENTS                                   | NOT REQUIRED (SECTION 910.2.1) |
| DRAFT CURTAINS                               | NOT REQUIRED (SECTION 910.3)   |
| FIRE SPRINKLER SYSTEM                        | NONE                           |

CHAPTER 10 - EXITING

SECTION 1006- MEANS OF EGRESS ILLUMINATION  
PROVIDE MEANS OF EGRESS ILLUMINATION AT A MINIMUM OF ONE FOOT-CANDLE AT PATH OF EGRESS SHOWN ON G1.10 TO MEET SECTION 1006. EXTEND TO 5'-0" OUTSIDE EGRESS DOORS.

EMERGENCY POWER LIGHTING REQUIRED THROUGHOUT PER OSSC 1006.2  
PROVIDE:  
• EMERGENCY POWER FOR MINIMUM 90 MINUTES. (BATTERY BACK-UP)  
• AVERAGE INITIAL ILLUMINATION OF 1 FOOT-CANDLE (11 LUX)  
• MINIMUM ILLUMINATION AT ANY POINT OF 0.1 FOOT-CANDLE (1 LUX)  
• MAXIMUM TO MINIMUM UNIFORMITY RATIO OF 40 TO 1, MAXIMUM. SEE FLOOR PLANS FOR PATH

SECTION 1008- DOORS, GATES, AND TURNSTILES  
RATED, SIZED AND HARDWARE PROVIDED TO MEET SECTION 1008 - SEE INDIVIDUAL FLOOR PLANS AND SPECIFICATIONS

SECTION 1011- EXIT SIGNS  
IF NOT EXISTING, PROVIDE EXIT SIGNAGE TO MEET SECTION 1011.1 - SEE ELECTRICAL PLANS FOR ADDITIONAL INFORMATION

SECTION 1014- EXIT ACCESS  
ALL SPACES EXIT DIRECTLY TO THE EXTERIOR, THROUGH AN ENTRY FOYER OR THROUGH AN INTERVENING ROOM

SECTION 1020- EXITS  
COMPONENTS AND OPENINGS ARE SHOWN ON THIS SHEET, INDIVIDUAL FLOOR PLANS, AND IN THE SPECIFICATIONS

SECTION 1027- EXIT DISCHARGE  
ALL EXITS DISCHARGE AT THE GROUND LEVEL

PLUMBING FIXTURE CALCULATIONS

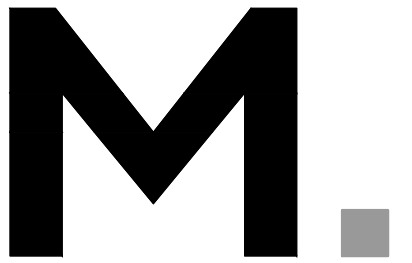
| OCCUPANCY                 |                   |                         |          |                   | WATER CLOSETS                           |                  |                         | LAVATORIES                              |                     |                      | DRINKING<br>FOUNTAINS |
|---------------------------|-------------------|-------------------------|----------|-------------------|-----------------------------------------|------------------|-------------------------|-----------------------------------------|---------------------|----------------------|-----------------------|
| USE                       | OCCUPANCY<br>TYPE | LOAD FACTOR<br>1004.1.2 | AREA     | OCCUPANCY<br>LOAD | RATIO                                   | WATER<br>CLOSETS | UNISEX WATER<br>CLOSETS | RATIO                                   | MEN'S<br>LAVATORIES | UNISEX<br>LAVATORIES | RATIO                 |
| POSSIBLE FUTURE<br>OFFICE | B                 | 150                     | 1,137.00 | 8                 | 1 PER 25 ≤ 50,<br>1 PER 50<br>REMAINDER | 0.30             | -                       | 1 PER 40 ≤ 80,<br>1 PER 80<br>REMAINDER | 0.09                | -                    | N/A                   |
| WAREHOUSE                 | S-1               | 500                     | 3,863.00 | 8                 | 1 PER 100                               | 0.32             | -                       | 1 PER 100                               | 0.04                | -                    | N/A                   |
| SUBTOTALS                 |                   |                         | 5,000.00 |                   |                                         | 0.62             | -                       |                                         | 0.13                | -                    | -                     |
| REQUIRED TOTALS           |                   |                         |          |                   |                                         | 1                |                         |                                         | 1                   | -                    | -                     |
| PROVIDED                  |                   |                         |          |                   |                                         |                  | 2                       |                                         |                     | 2                    |                       |

\*OCCUPANT LOAD LESS THAN 15 - SEPARATE FACILITIES NOT REQUIRED 2902.2 EXCEPTION 2  
- SEPARATE FACILITIES NOT REQUIRED 2902.2 EXCEPTION 2  
- DRINKING FOUNTAIN NOT REQUIRED 2902.6

PER OSSC CHAPTER 29

EXITING CALCULATIONS

| CODE SECTION    | OCCUPANCY                   |                         |       |                                | 1005                   |                 |                   | 1006.2.1                |                            | 1007.1.1              |                              | 1017.2                 |                                | 1006              |                   |
|-----------------|-----------------------------|-------------------------|-------|--------------------------------|------------------------|-----------------|-------------------|-------------------------|----------------------------|-----------------------|------------------------------|------------------------|--------------------------------|-------------------|-------------------|
| USE             | OCCUPANCY<br>TYPE (CHAP. 3) | LOAD FACTOR<br>1004.1.2 | AREA  | OCCUPANT<br>LOAD<br>(1004.1.1) | EGRESS WIDTH<br>FACTOR | EGRESS<br>WIDTH | WIDTH<br>PROVIDED | COMMON<br>PATH REQUIRED | COMMON<br>PATH<br>PROVIDED | MIN. EXIT<br>DISTANCE | EXIT<br>DISTANCE<br>PROVIDED | MAX TRAVEL<br>DISTANCE | TRAVEL<br>DISTANCE<br>PROVIDED | EXITS<br>REQUIRED | EXITS<br>PROVIDED |
| FIRST FLOOR     |                             |                         |       |                                |                        |                 |                   |                         |                            |                       |                              |                        |                                |                   |                   |
| POSSIBLE OFFICE | B                           | 100                     | 1,137 | 12                             | 0.2                    | 3"              | 72"               | 100'-0"                 | N/A                        | 55'-0"                | 75'-0"                       | 200'-0"                | -                              | 1                 | 2                 |
| WAREHOUSE       | S-1                         | 500                     | 3,863 | 8                              | 0.2                    | 2"              | 72"               | 100'-0"                 | N/A                        | 55'-0"                | 75'-0"                       | 200'-0"                | 70'-2"                         | 1                 | 2                 |
| TOTAL           |                             |                         | 5,000 | 20                             |                        | 5"              | 144"              |                         |                            |                       |                              |                        |                                | 5                 | 4                 |



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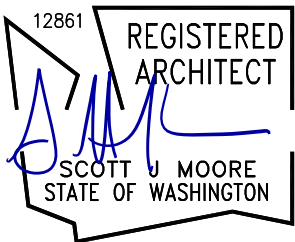
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SHEET TITLE:  
CODE  
ANALYSIS

DRAWN BY: REW

CHECKED BY: SJM

SHEET:

G1.10

JOB NO.  
2190380.01

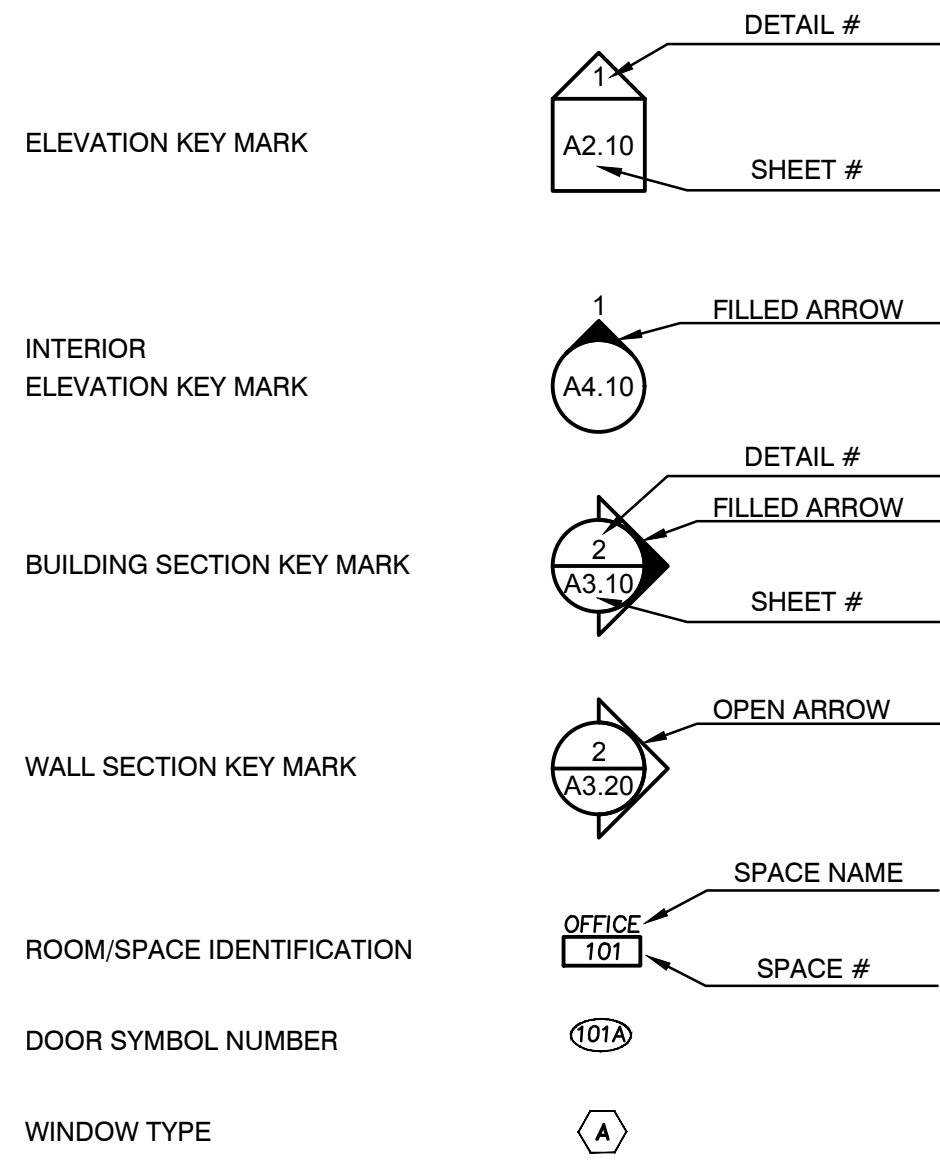
BID SET - SEPTEMBER 14, 2020

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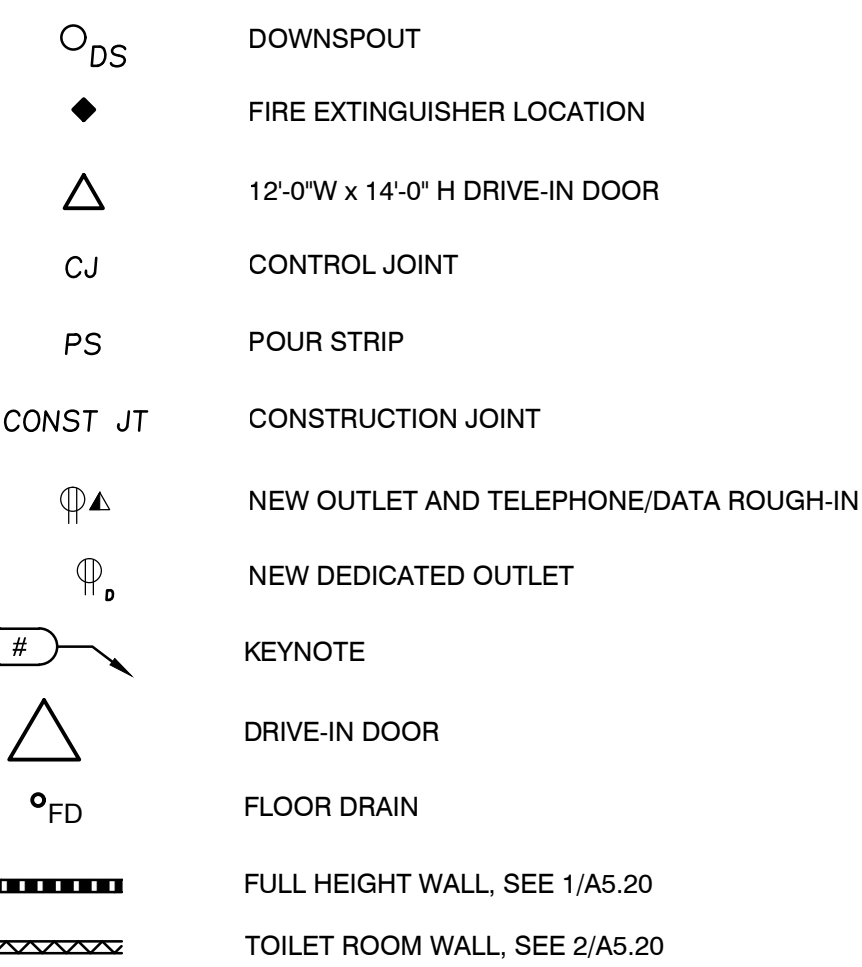


ARCHITECTURAL LEGEND

ANNOTATION SYMBOLS

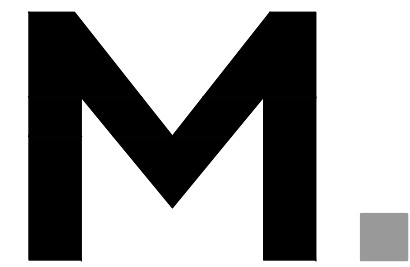


MISC. SYMBOLS



ARCHITECTURAL GENERAL NOTES

- A. OVERALL FLOOR PLANS ARE INTENDED TO IDENTIFY ENTIRE FLOOR AREA. SEE INDIVIDUAL AREA PLANS FOR SPECIFIC DIMENSIONS, DETAILING, PARTITION TYPES, AND ADDITIONAL INFORMATION.
- B. PROVIDE 18"0" CLEAR MINIMUM TO BOTTOM OF STRUCTURE, MECHANICAL DUCTS, LIGHTING, SPRINKLERS, ETC.
- C. ALL WALLS ARE 6" ABOVE CEILING GRID OR FULL HEIGHT TO UNDERSIDE OF DECK UNLESS OTHERWISE NOTED.
- D. WHERE TOP OF WALL MEETS UNDERSIDE OF ROOF DECK, PROVIDE DEFLECTION HEAD AS REQUIRED.
- E. REFERENCE BUILDING ELEVATIONS FOR EXTERIOR WINDOW TYPE DESIGNATION.
- F. REFERENCE DOOR SCHEDULE FOR DOOR TYPE DESIGNATION AND ADD'L INFORMATION.
- G. SEE CODE ANALYSIS PLANS FOR FIRE EXTINGUISHER LOCATIONS.
- H. PROVIDE BLOCKING AS REQUIRED ADJACENT TO FIRE EXTINGUISHERS FOR OWNER INSTALLED AED STATIONS
- I. COORDINATE ALL EXTERIOR WALL PENETRATIONS AMONG AFFECTED DISCIPLINES.
- J. WATERPROOFING SYSTEMS AND THEIR INSTALLATIONS SHALL BE SUITABLE FOR THEIR INTENDED PURPOSES.
- K. PROVIDE APPROPRIATE AND COMPLETE SEALANT OF ALL PENETRATIONS THROUGH EXTERIOR ASSEMBLIES. SEAL VOIDS BETWEEN SLEEVES, CONDUITS, AND OTHER PENETRATIONS WITH APPROPRIATE JOINT SEALANT. CONTRACTOR TO ASSURE PROPER SEALANT OF ALL VOIDS AT OPENINGS AND PENETRATIONS.
- L. CONTRACTOR TO COORDINATE WALL MOUNTED FURNITURE, INCLUDING BUT NOT LIMITED TO, CABINETRY, PROJECTION SCREENS, WHITE BOARDS, TELEVISIONS, ETC. AND PROVIDE NECESSARY BLOCKING AS REQUIRED.
- M. ALL DIMENSIONS TO FACE OF STUD, CENTERLINE OF COLUMN OR EXTERIOR FACE OF WALL, UNLESS OTHERWISE NOTED. ALIGN FINISHES WHERE INDICATED.
- N. WALL THICKNESSES ARE NOMINAL UNLESS OTHERWISE NOTED.
- O. DIMENSIONS MARKED "CLR" ARE FROM FINISH SURFACE TO FINISH SURFACE. DIMENSIONS WITH THIS MARK TAKE PRIORITY OVER ADJACENT DIMENSIONS. DIMENSIONS ADJACENT TO LATCH SIDE OF DOORS INDICATE REQUIRED CLEARANCES BETWEEN CLEAR DOOR OPENING AND ADJACENT FINISH.
- P. ALL DIMENSIONS SHOWN AS PLUS/MINUS (+/-) ARE FOR GENERAL LAYOUT AND REFERENCE ONLY.
- Q. DOORS NOT DIMENSIONED ARE TO BE LOCATED 4" FROM FACE OF WALL TO OUTSIDE EDGE OF JAMB.
- R. ELECTRICAL/DATA OUTLETS SHOWN FOR REFERENCE ONLY. DESIGN-BUILD ELECTRICIAN TO CONFIRM ALL LOCATIONS AND REQUIREMENTS PRIOR TO START OF CONSTRUCTION.
- S. COORDINATE AND REFER TO DESIGN BUILD MECHANICAL AND ELECTRICAL DISCIPLINES FOR SPECIFIC INFORMATION, LOCATIONS, DIMENSIONS, CONNECTIONS, AND PENETRATIONS.
- T. SEE STRUCTURAL DRAWINGS FOR FRAMING, SLAB EDGE, FLOOR OPENINGS INFORMATION.
- U. ALL EXPOSED EXTERIOR STEEL TO BE GALVANIZED.



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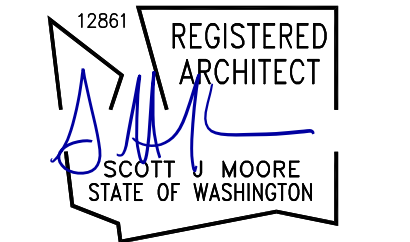
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SHEET TITLE:  
ARCHITECTURAL  
GENERAL  
NOTES

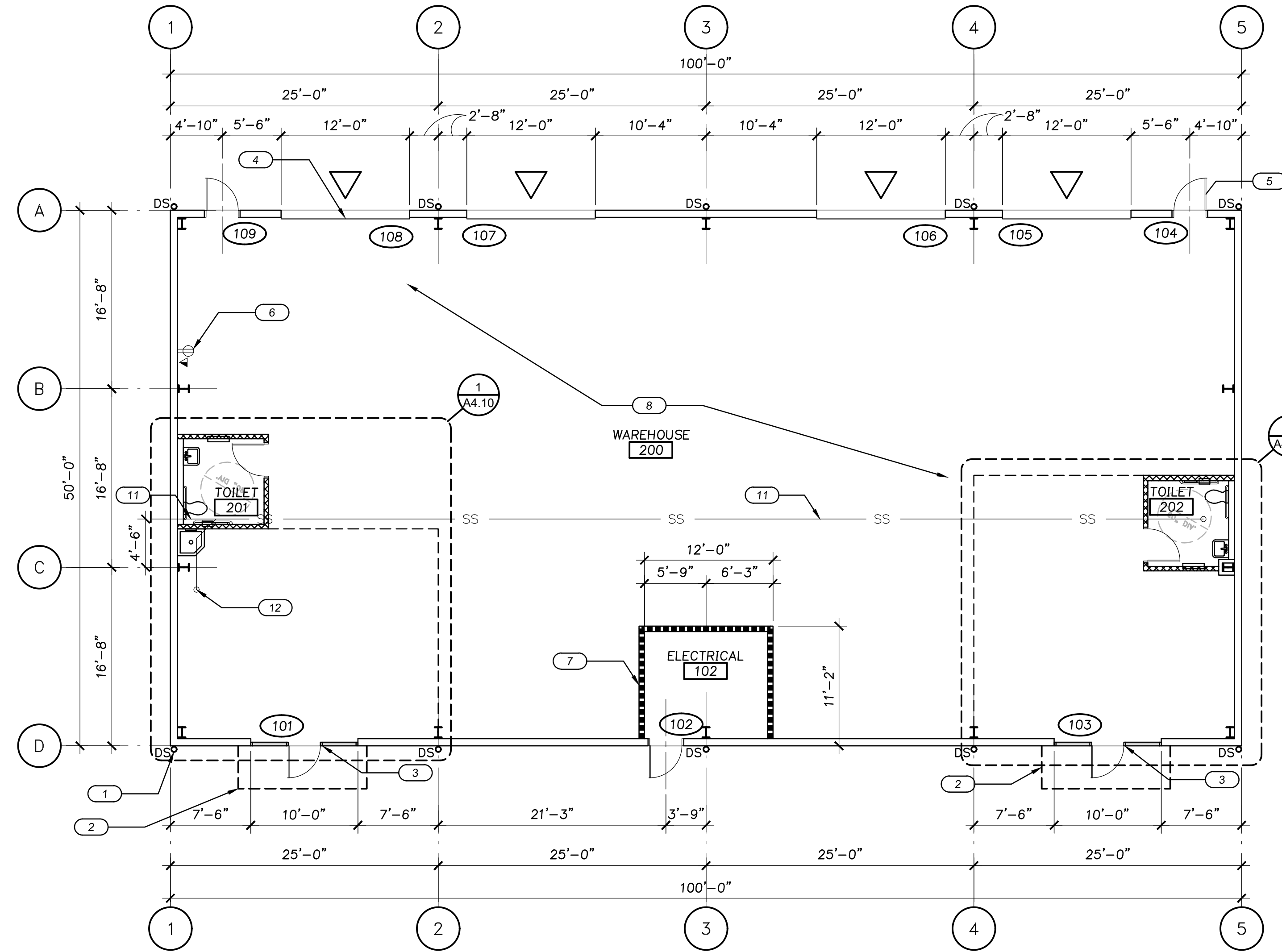
DRAWN BY: REW  
CHECKED BY: REW  
SHEET:

A0.01  
JOB NO. 2190380.01

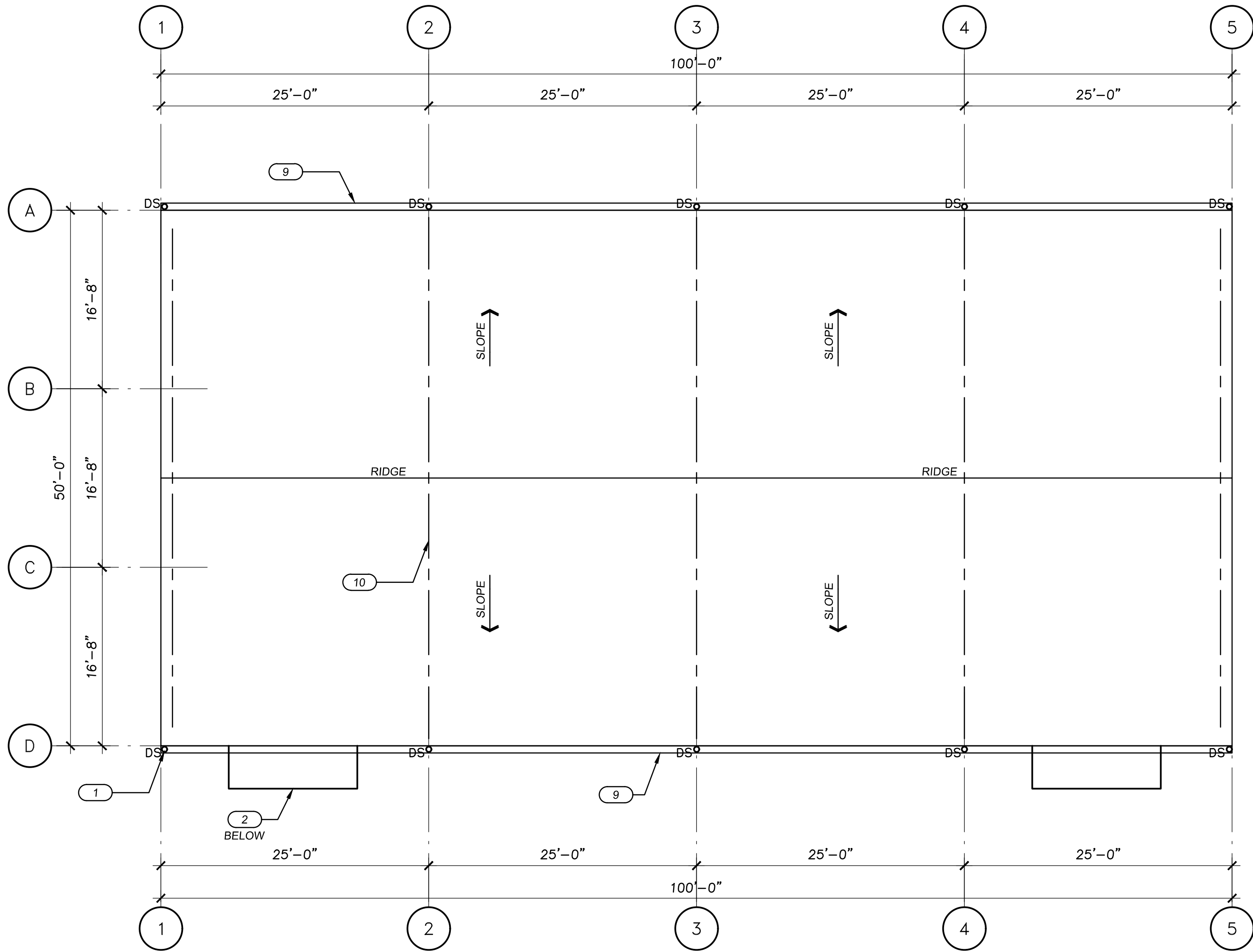
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**1 FLOOR PLAN**  
A1.10 1/8"=1'-0"



**2 ROOF PLAN**  
A1.10 1/8"=1'-0"

### KEYNOTES

- 1. 4"X5' DOWNSPOUT
- 2. STEEL CANOPY ABOVE
- 3. ANODIZED STOREFRONT ENTRY
- 4. 12'-0" X 12'-0" DRIVE-IN DOOR
- 5. 3'-0" X 7'-0" HOLLOW METAL INSULATED MAN DOOR
- 6. ELECTRICAL SHOWN FOR REFERENCE ONLY, BY DESIGN BUILD ELECTRICAL
- 7. FULL HEIGHT WALL
- 8. PRE-ENGINEERED METAL BUILDING
- 9. 6" SHEET METAL GUTTER
- 10. BEAM BELOW
- 11. 6" SANITARY SEWER LINE BELOW SLAB
- 12. STUB FOR FUTURE TOILET.

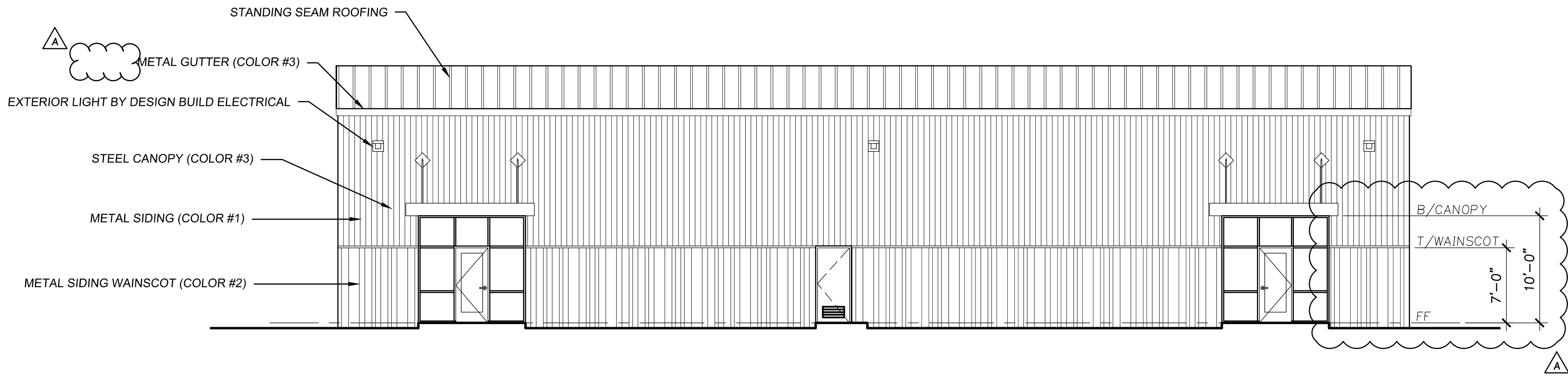
### GENERAL NOTES

- COMMON NOTES:**
- A. SEE ARCHITECTURAL GENERAL NOTES ON A0.01 FOR ADDITIONAL INFORMATION
  - B. ALL DIMENSIONS ARE TO FACE OF WALL, CENTERLINE OF COLUMN OR OUTSIDE FACE OF WALL, UNO.
- ROOF PLANS**
- A. MAINTAIN 1" PER FOOT MINIMUM SLOPE THROUGHOUT ROOF.
  - B. ALL ROOF ELEVATIONS TO TOP OF STEEL/BOTTOM OF DECK.
  - C. CONTRACTOR TO PROVIDE COVERS, ENCLOSURES, AND/OR SEALANTS AT ALL ROOF PENETRATIONS, PIPES, CURBS, DUCTS, AND CONNECTIONS. COORDINATE AND REFER TO MECHANICAL/ELECTRICAL DISCIPLINES FOR ADDITIONAL INFORMATION.

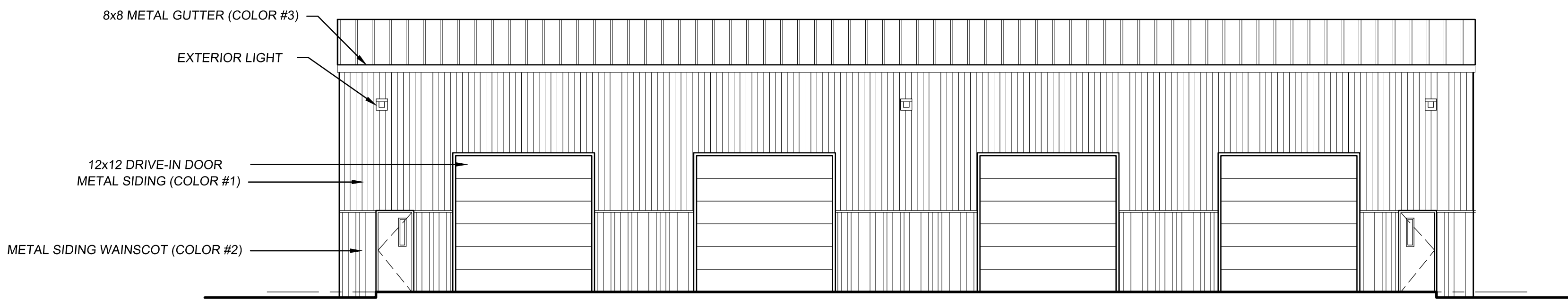
NOTE: DESIGN BUILD PRE-ENGINEERED METAL BUILDING BY OTHERS, SHOWN FOR REFERENCE/STYLE ONLY

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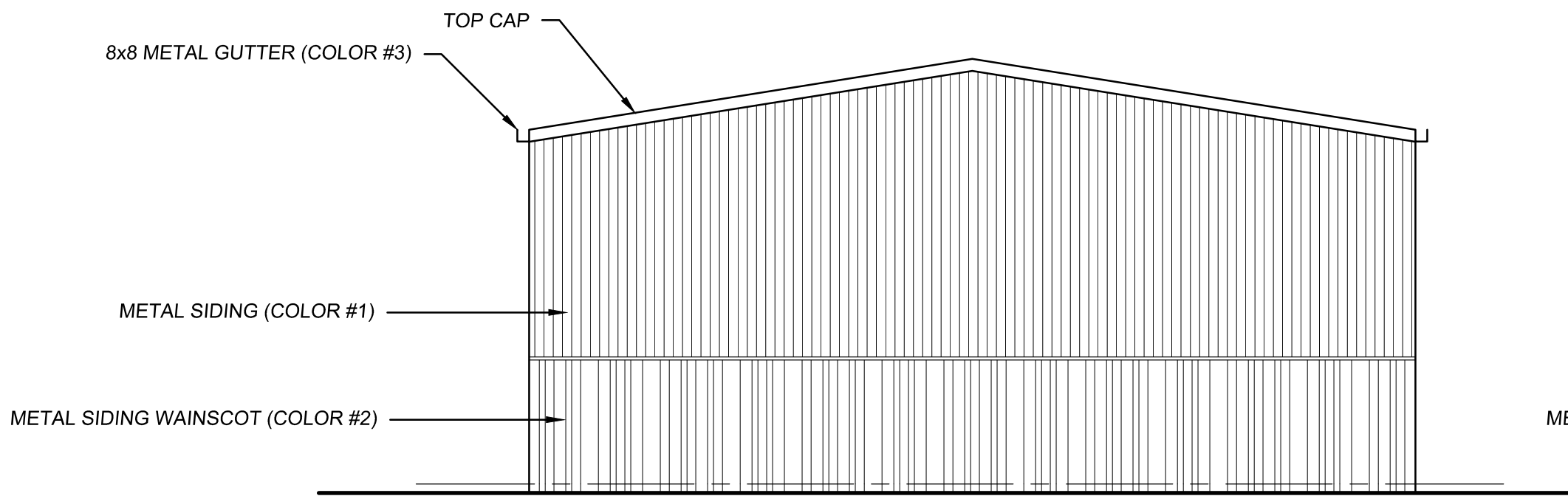




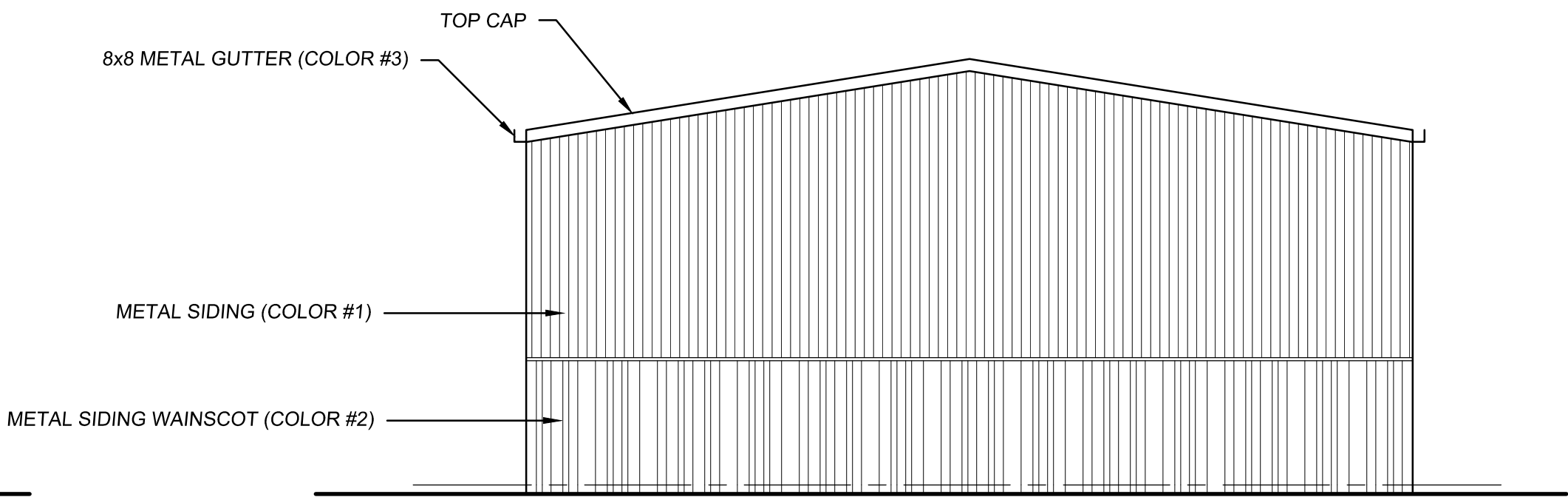
1 SOUTH ELEVATION  
A2.10 1/8"=1'-0"



2 NORTH ELEVATION  
A2.10 1/8"=1'-0"

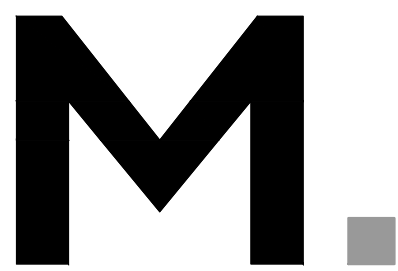


3 EAST ELEVATION  
A2.10 1/8"=1'-0"



4 WEST ELEVATION  
A2.10 1/8"=1'-0"

NOTE: DESIGN BUILD PRE-ENGINEERED  
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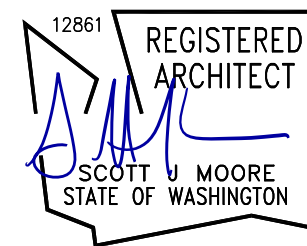
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SHEET TITLE:  
ELEVATIONS

BASE BID

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SHEET:

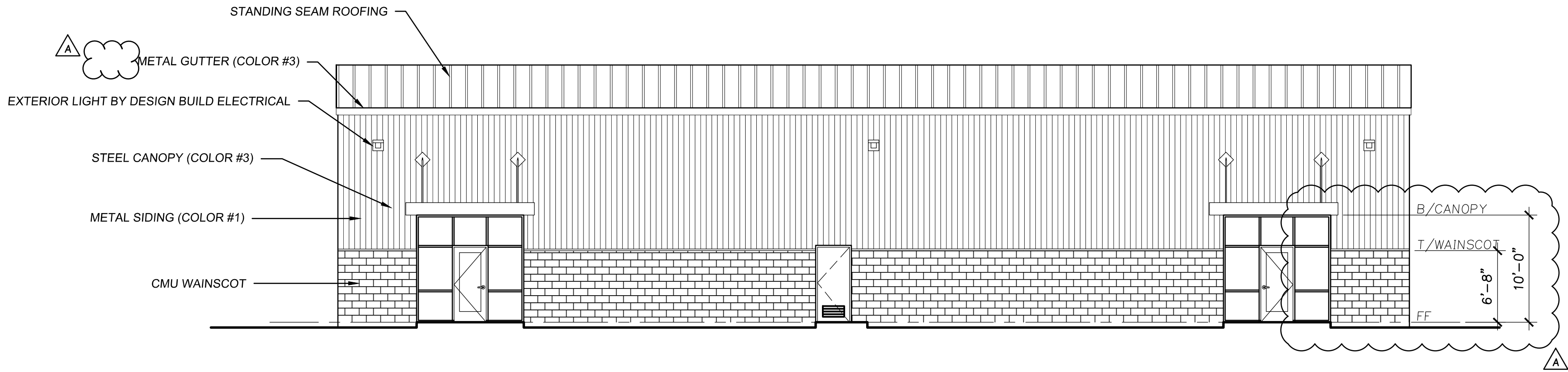
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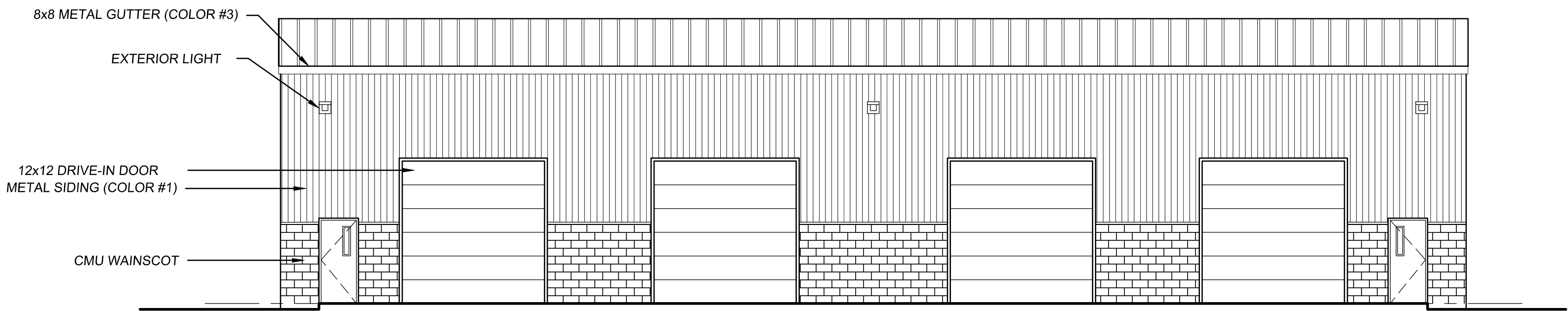
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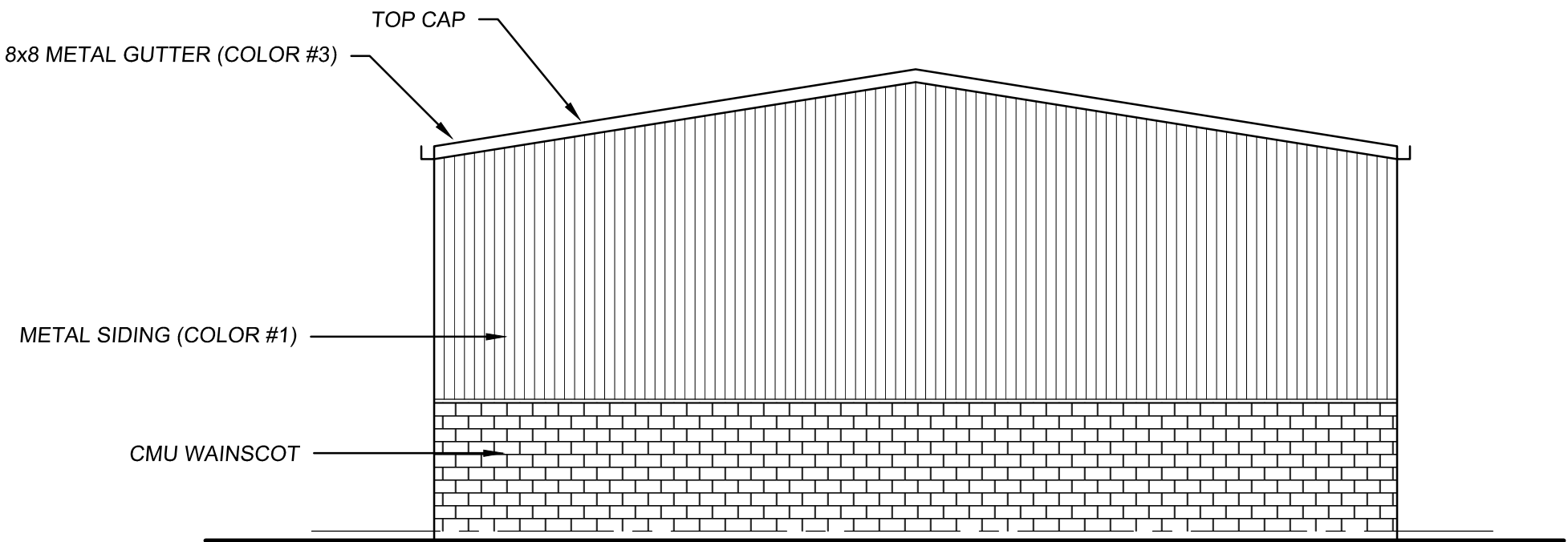




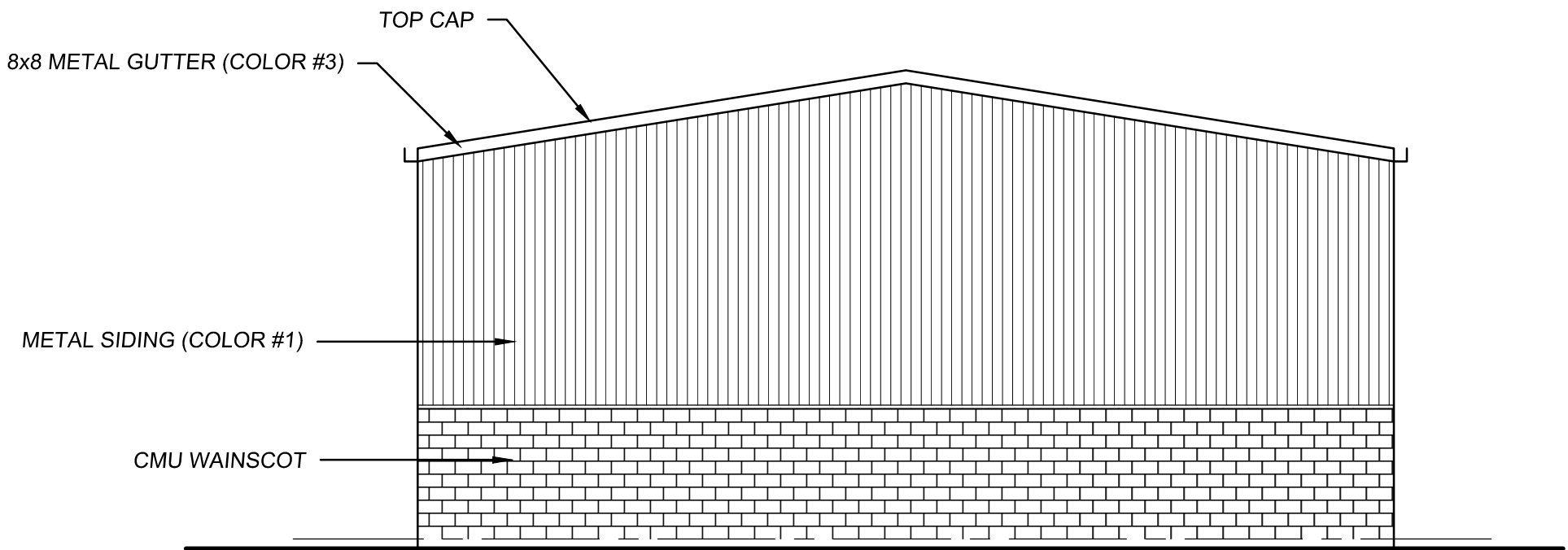
1 SOUTH ELEVATION  
A2.10 1/8"=1'-0"



2 NORTH ELEVATION  
A2.10 1/8"=1'-0"

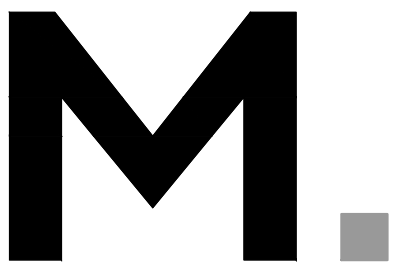


3 EAST ELEVATION  
A2.10 1/8"=1'-0"



4 WEST ELEVATION  
A2.10 1/8"=1'-0"

NOTE: DESIGN BUILD PRE-ENGINEERED  
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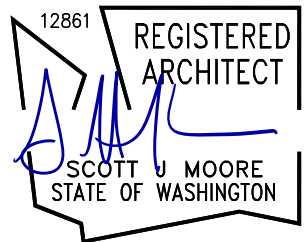
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SHEET TITLE:  
ELEVATIONS

BID ALTERNATE

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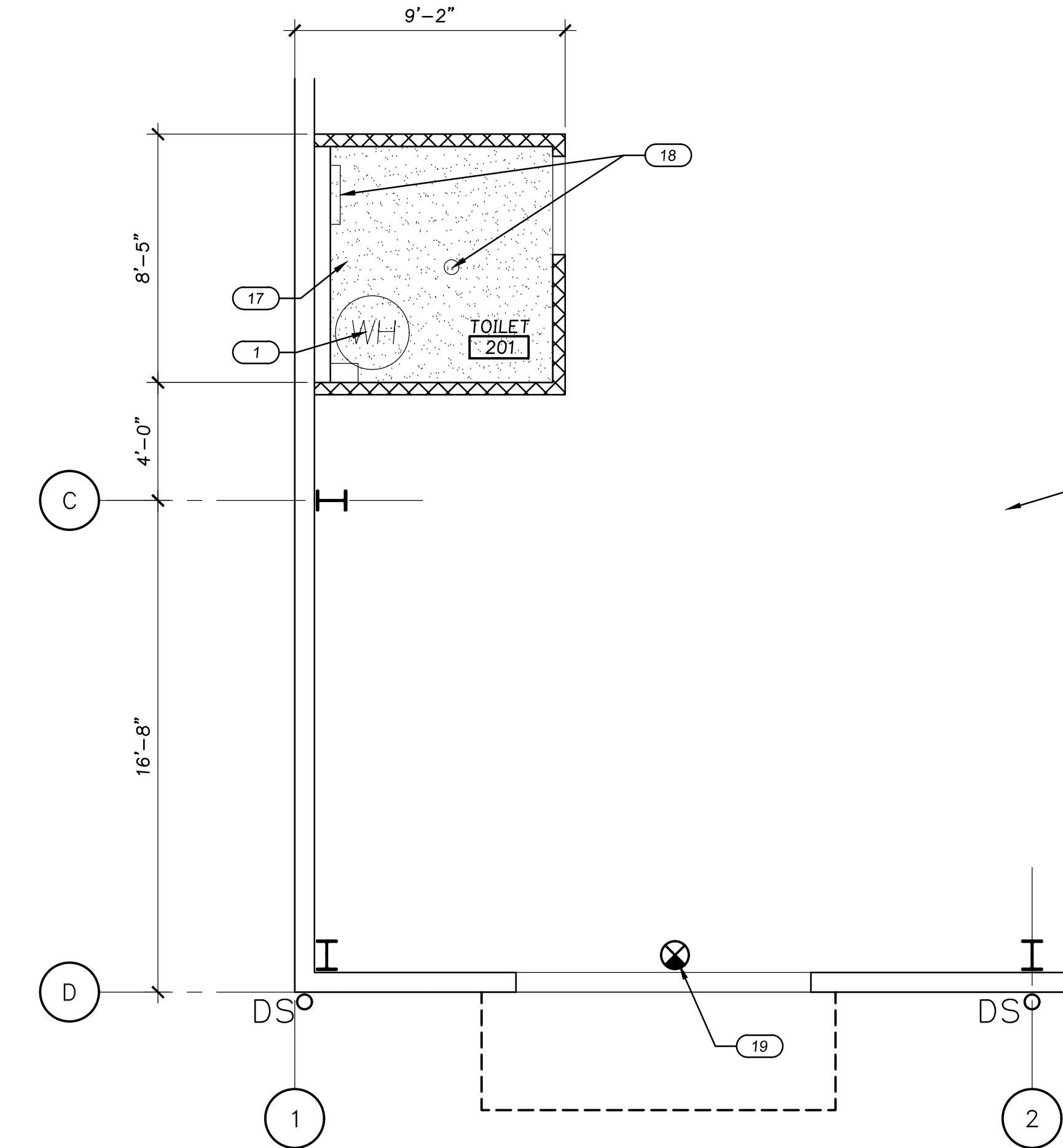
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GENERAL NOTES

- COMMON NOTES:
- A. SEE ARCHITECTURAL GENERAL NOTES ON A0.01 FOR ADDITIONAL INFORMATION
  - B. SEE [A0.01] FOR WALL TYPES
- RESTROOM/CABINETRY PLANS
- A. SEE A0.02 FOR ADDITIONAL INFORMATION ON FIXTURE MOUNTING HEIGHTS. ALL REQUIRED ADA CLEARANCES ARE TO FACE OF FINISH.
  - B. ALL DIMENSIONS THIS SHEET ARE TO FACE OF FINISH UNLESS OTHERWISE NOTED.
  - C. INSULATE ALL UNDER COUNTER HOT WATER AND WASTE LINES.
  - D. COORDINATION OF BLOCKING REQUIREMENTS FOR WALL-MOUNTED SPECIALTIES BY CONTRACTOR
- FINISH PLANS
- A. CENTER FLOORING TRANSITIONS AT CENTER OF DOOR JAMBS, UNLESS OTHERWISE NOTED.
  - B. PROVIDE VINYL REDUCER AT ALL FLOORING MATERIAL TRANSITIONS, UNLESS OTHERWISE NOTED.
  - C. ALL WALLS TO BE PAINTED P-1 UNLESS OTHERWISE NOTED.

- REFLECTED CEILING PLANS
- A. LIGHTING FIXTURES AND LAYOUT SHOWN FOR PRELIMINARY DESIGN INTENT ONLY. DESIGN-BUILD ELECTRICIAN RESPONSIBLE FOR FINAL LAYOUT AND CONFIRMATION OF COMPLIANCE WITH WASHINGTON ENERGY CODE.

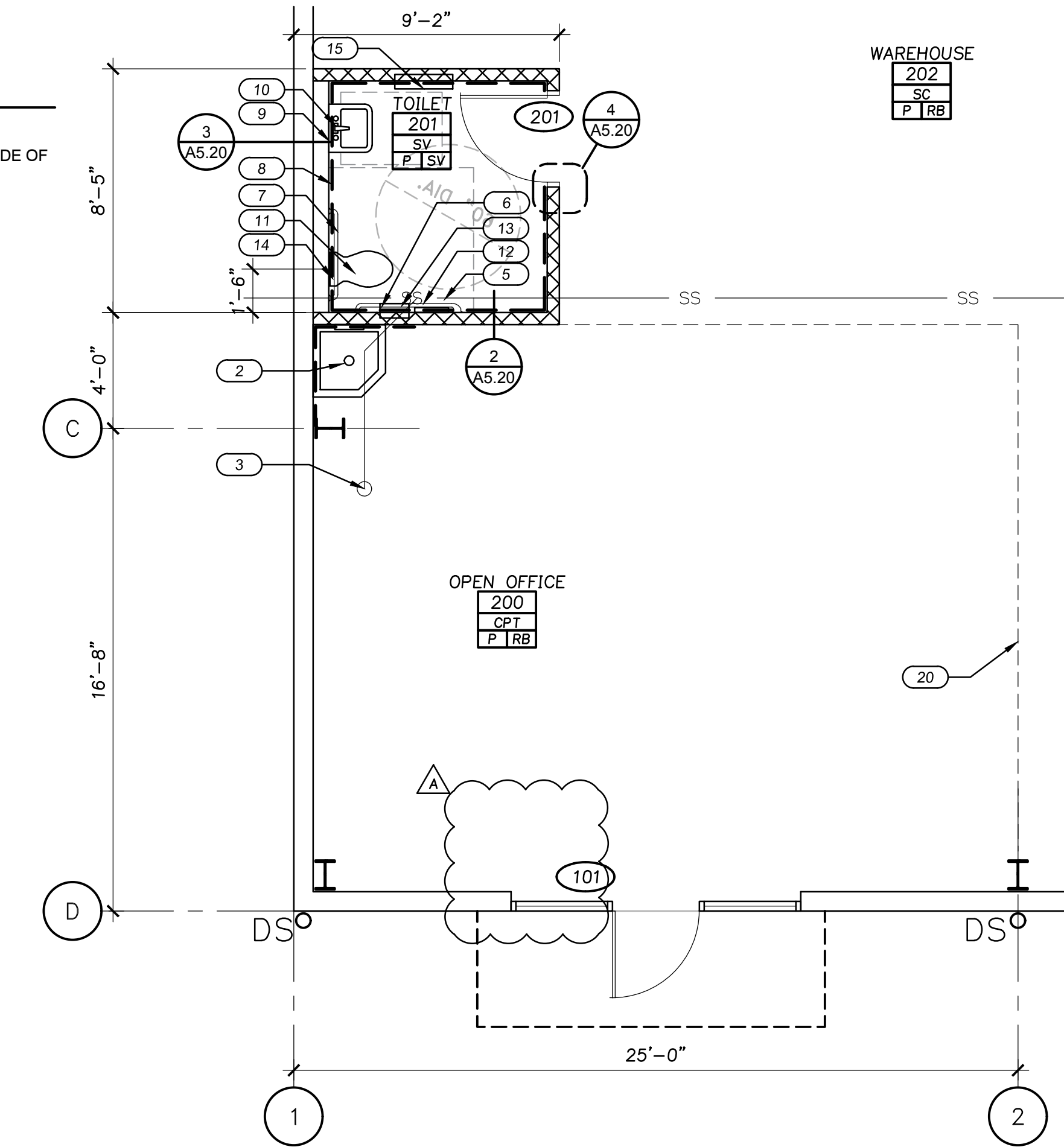


3  
A4.10  
1/4"=1'-0"

ENLARGED RCP PLAN

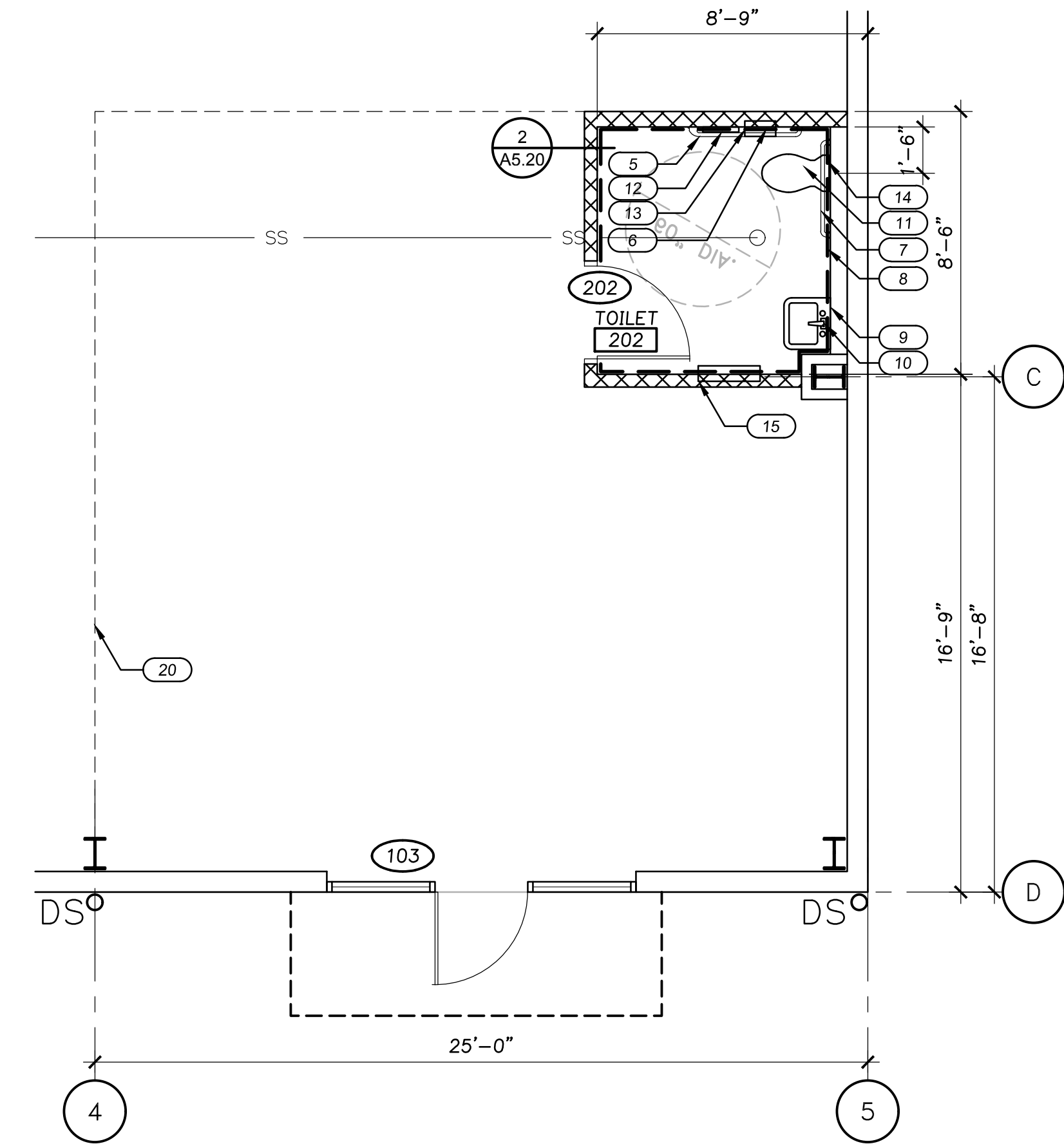
KEYNOTES

1. WATER HEATER, BY DESIGN BUILD PLUMBING
2. JANITOR SINK WITH FRP WAINSCOT 48" TALL AND 18" PAST EACH SIDE OF SINK
3. STUB FOR FUTURE TOILET
4. OPEN TO STRUCTURE
5. 42" GRAB BAR, MOUNTED AT 36" AFF
6. 18" GRAB BAR, SEE A0.01
7. 36" GRAB BAR, MOUNTED AT 36" AFF
8. 4'-6" TALL FRP WAINSCOT, START ABOVE 6" COVED BASE
9. 24"x48" FIXED MIRROR, CENTER ABOVE SINK
10. WALL MOUNTED LAVATORY
11. FLOOR MOUNTED FLUSHOMETER TOILET
12. DUAL TOILET PAPER HOLDER
13. SANITARY NAPKIN DISPOSAL
14. SURFACE MOUNTED SEAT COVER DISPENSER
15. SEMI RECESSED PAPER TOWEL DISPENSER
16. NOT USED
17. PAINTED GYPSUM BOARD CEILING AT 9'-0" AFF
18. LIGHTING SHOWN FOR REFERENCE ONLY
19. LIGHTED EXIT SIGN, BY DESIGN BUILD ELECTRICAL
20. POSSIBLE FUTURE OFFICE



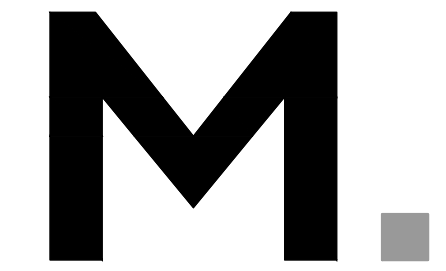
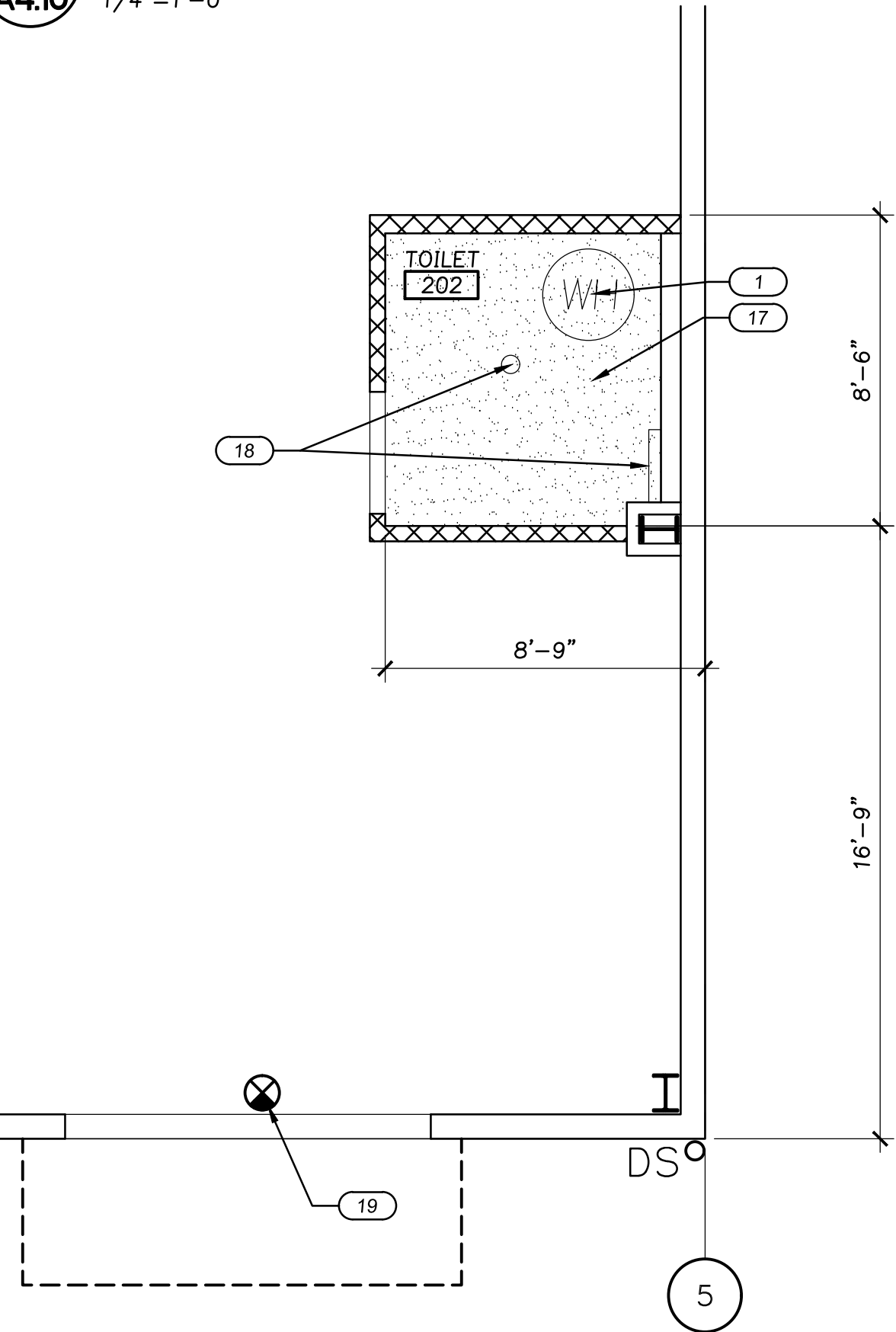
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A4.10  
1/4"=1'-0"

ENLARGED OFFICE PLAN



2  
A4.10  
1/4"=1'-0"

ENLARGED TOILET ROOM 203 PLAN



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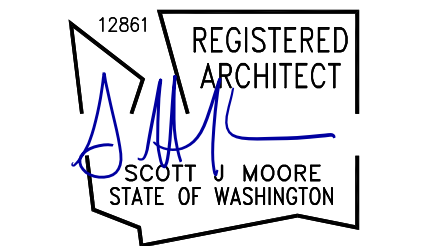
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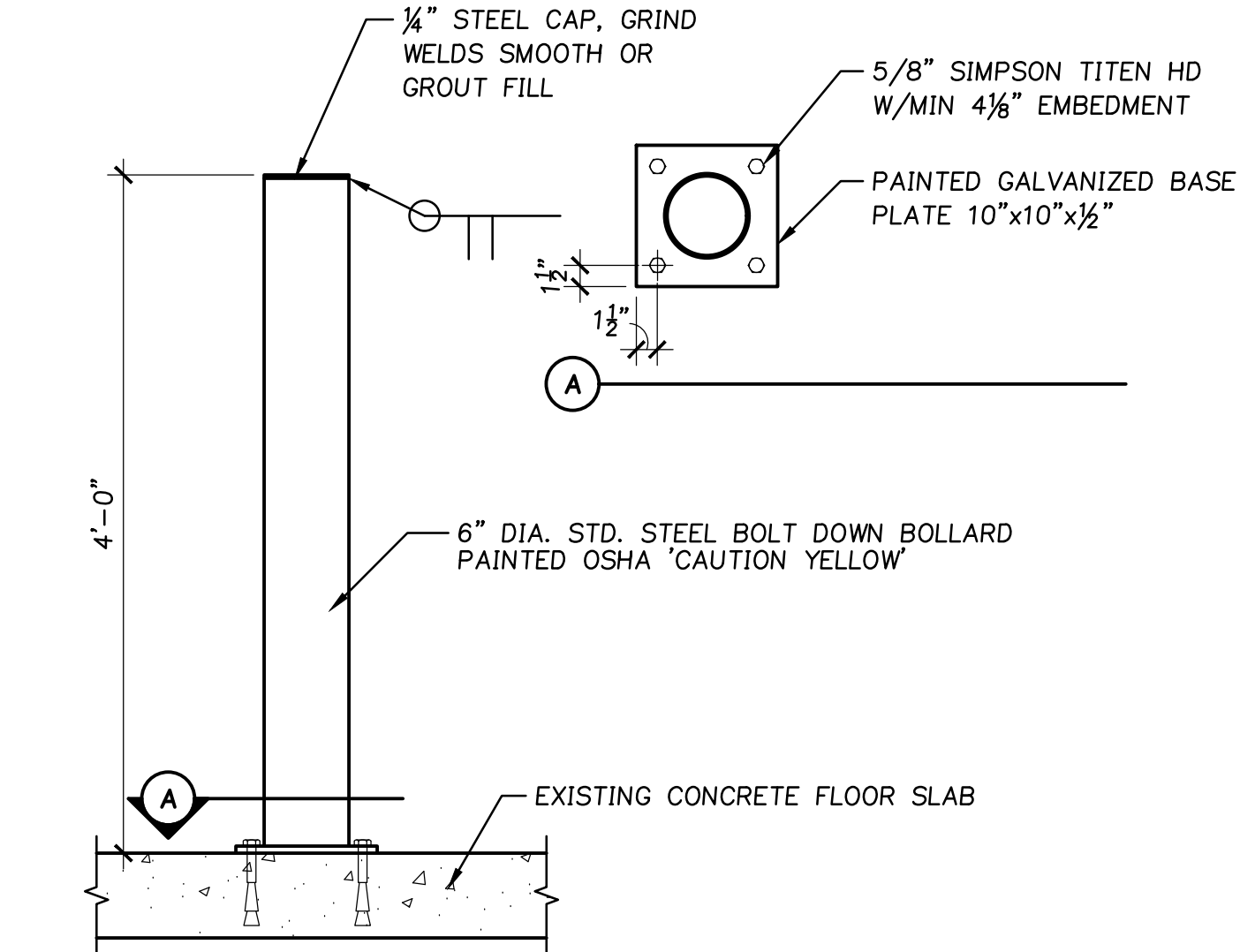
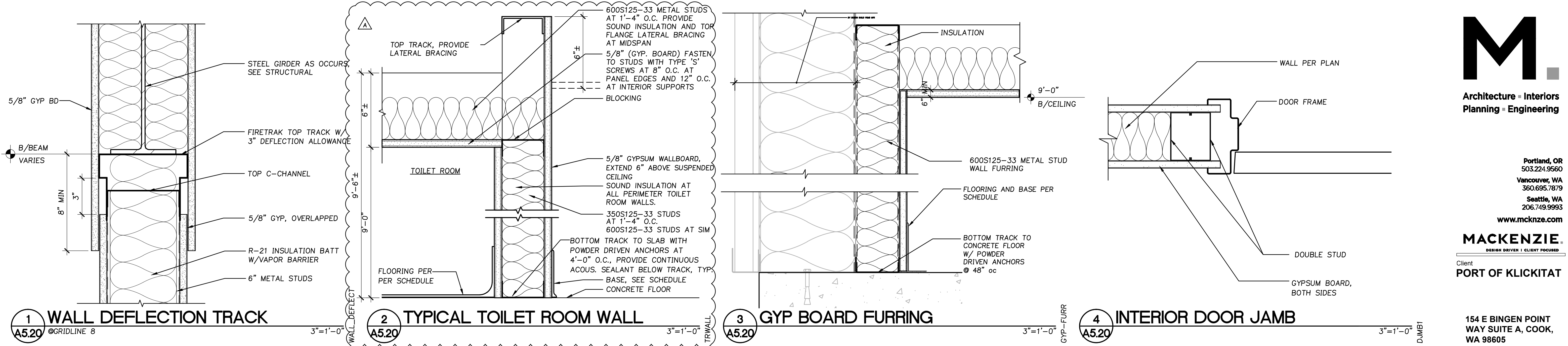
| REVISION SCHEDULE |             |            |
|-------------------|-------------|------------|
| Delta             | Issued As   | Issue Date |
| A                 | ADDENDUM #1 | 09/30/2020 |
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|                   |             |            |

SHEET TITLE:  
ENLARGED  
OFFICE AND  
REFLECTED  
CEILING PLANS

DRAWN BY: REW  
CHECKED BY: SJM  
SHEET:

A4.10  
JOB NO. 2190380.01





| SPAN TABLE FOR METAL STUDS |                                                                  |
|----------------------------|------------------------------------------------------------------|
| DESIGNATION                | STUD CONDITIONS - INTERIOR PARTITIONS                            |
| 362S125-18                 | ALL WALLS 11'-0" TO 12'-0" IN HEIGHT - 16" OC                    |
| 362S125-18                 | ALL WALLS UNDER 11'-0" IN HEIGHT - 24" OC                        |
| 362S162-43                 | ALL WALLS 12'-0" TO 16'-0" IN HEIGHT - 16" OC                    |
|                            | ALL WALLS WITH TILE FINISH<br>ALL MIRRORED WALLS IN TOILET ROOMS |
| 362S162-68                 | ALL WALLS 16'-0" TO 24'-0" IN HEIGHT - 12" OC                    |

5 BOLLARD 1"=1'-0" BOLLARD

6 SPAN TABLE FOR METAL STUDS



Architecture = Interiors  
Planning = Engineering

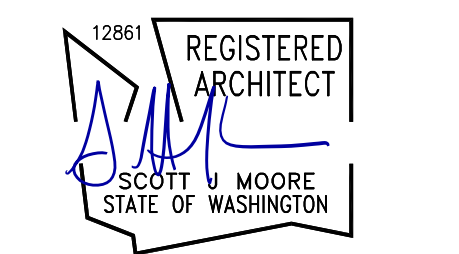
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PORT OF KLICKITAT

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WAY SUITE A, COOK,  
WA 98605

Project  
SPECULATIVE  
INDUSTRIAL  
DEVELOPMENT



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SHEET TITLE:  
DETAILS

DRAWN BY: REW  
CHECKED BY: SJM  
SHEET:

A5.20  
JOB NO. 2190380.01



22 00 00 PLUMBING

A. The design-build plumbing contractor shall furnish and install a complete and operative plumbing system to meet all local and state codes.

B. Plumbing design to include sanitary sewer pump at interior of building and any required permitting.

C. Provide underground sewer/plumbing for single occupant toilet rooms as shown.

D. Provide two separate sub meters at each building for tenant division.

E. Provide plumbing submittals and plans for Owner's review prior to construction.

A. The design-build HVAC contractor shall furnish and install a complete and operative HVAC system to meet all local and state codes.

- C. Provide standard heating at office.
- D. Natural Gas System.
- E. System designed for future capabilities for office space or if needed per bay.
- F. Provide HVAC submittals and plans for Owner's review.
- G. All work shall include a one-year parts and labor warranty and a 90-day service contract from the date of the Notice of Completion.

A. The electrical work shall be performed on a design-build basis. The design-build electrical contractor shall furnish and install a complete and operative electrical system to meet all local and state codes.

- C. Provide sub metering for (2) tenants each building (800 AMP each tenant).
- D. Provide Panel at each tenant (2) per building.
- E. Provide electrical plans for Owner's review.
- F. Provide lighting, standard LED. 30 fc at Warehouse.
- G. Provide energy compliance code lighting calculations where required by code.
- H. All lighting and switching shall be per code requirements.
- I. 440 power to building.

|                             |                                                                                                                                                                          |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SV:                         | MANNINGTON COMMERCIAL: TBD<br>6" COVED INTEGRAL BASE.                                                                                                                    |
| P:                          | SHERWIN WILLIAMS: TBD<br>NOTE: EGGSHELL WASHABLE FINISH AT CEILING AND SOFFITS, SATIN WASHABLE FINISH AT WALLS. SEMI-GLOSS FINISH AT ALL TOILET ROOM WALLS AND CEILINGS. |
| RB-1:                       | JOHNSONITE: TBD<br>4" COVED AT CARPET.                                                                                                                                   |
| OUTLET/SWITCH(S) AND COVER: | WHITE                                                                                                                                                                    |
| FRAME:                      | TIMELY, BLACK                                                                                                                                                            |
| FRP-1:                      | PANOLAM, CLASSIC COLLECTION, WHITE-SMOOTH                                                                                                                                |
| SAT-1:                      | ARMSTRONG 2767D 24x48 SECOND LOOK II                                                                                                                                     |

|                       |                                                                                                                                                           |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| TOILET ROOM FIXTURES: |                                                                                                                                                           |
| LAVATORY:             | GERBER, 12-314 PLYMOUTH WALL HUNG OR SIMILAR, BY DESIGN BUILD PLUMBING                                                                                    |
| LAVATORY FAUCET:      | DELTA, CLASSIC SERIES, SINGLE HANDLE, 3 HOLE SINK, 4" CENTER SET OR SIMILAR, BY DESIGN BUILD PLUMBING                                                     |
| WATER CLOSET:         | AMERICAN STANDARD, CADET RIGHT HEIGHT ELONGATED TOILET WITH BEMIS COMMERCIAL HEAVY-DUTY PLASTIC TOILET SEAT, 1955SST OR SIMILAR, BY DESIGN BUILD PLUMBING |

| DOOR NO. | DOOR  |        |        |      |           |           | FRAME      |            | HARDWARE GROUP | GLAZING | RATING | REMARKS |
|----------|-------|--------|--------|------|-----------|-----------|------------|------------|----------------|---------|--------|---------|
|          | WIDTH | HEIGHT | THK.   | TYPE | DOOR MAT. | DOOR FIN. | FRAME MAT. | FRAME FIN. |                |         |        |         |
| 101      | 3'0"  | 7'0"   | 1-3/4" | A    | ALM       | FF        | ALM        | FF         | 2              | SF      | -      | -       |
| 102      | 3'0"  | 7'0"   | 1-3/4" | C    | HM        | PA        | HM         | PA         | 3              | VP      | -      | -       |
| 103      | 3'0"  | 7'0"   | 1-3/4" | A    | ALM       | FF        | ALM        | FF         | 2              | SF      | -      | -       |
| 104      | 3'0"  | 7'0"   | 1-3/4" | B    | HM        | PA        | HM         | PA         | 3              | VP      | -      | -       |
| 105      | 12'0" | 12'0"  | 2"     | D    | MTL       | PA        | MTL        | PA         | 1              | VP      | -      | -       |
| 106      | 12'0" | 12'0"  | 2"     | D    | MTL       | PA        | MTL        | PA         | 1              | VP      | -      | -       |
| 107      | 12'0" | 12'0"  | 2"     | D    | MTL       | PA        | MTL        | PA         | 1              | VP      | -      | -       |
| 108      | 12'0" | 12'0"  | 2"     | D    | MTL       | PA        | MTL        | PA         | 1              | VP      | -      | -       |
| 109      | 3'0"  | 7'0"   | 1-3/4" | B    | HM        | PA        | HM         | PA         | 3              | VP      | -      | -       |
| 201      | 3'0"  | 7'0"   | 1-3/4" | -    | WD        | ST        | TIMELY     | FF         | 4              | -       | -      | -       |
| 202      | 3'0"  | 7'0"   | 1-3/4" | B    | WD        | ST        | TIMELY     | FF         | 4              | -       | -      | -       |

|     |                          |
|-----|--------------------------|
| AL  | ALUMINUM                 |
| AN  | ANODIZED                 |
| FF  | FACTORY FINISH           |
| FL  | FULL LITE GLAZING        |
| GL  | GLASS                    |
| HC  | HOLLOW CORE              |
| HL  | HALF LITE GLAZING        |
| HM  | HOLLOW METAL             |
| HMI | HOLLOW METAL - INSULATED |
| HMK | HOLLOW METAL KNOCKDOWN   |
| HMW | HOLLOW METAL WELD        |

| GROUP 1 |                              |
|---------|------------------------------|
| 1       | MANUFACTURES HARDWARE        |
| 1       | WEATHER SEALS (AT DOCK HIGH) |
| 1       | MOTORIZED (ALTERNATE)        |
| 1       | LOCKING FUNCTION             |
| 1       | THRESHOLD                    |

- 1 PUSH/PULL
- 1 CLOSER
- 1 PANIC BAR
- 1 SEE SPECIFICATIONS
- 1 THRESHOLD

1 ENTRY LOCKSET  
1 WEATHER SEAL  
1

1 PANIC  
1 THRESHOLD

|     |                                    |
|-----|------------------------------------|
| 1.5 | PAIR BUTTS                         |
| 1   | PRIVACY LOCKSET                    |
| 1   | DOOR CLOSER                        |
| 1   | 10" KICK PLATE                     |
| 1   | DOOR STOP                          |
| 3   | SILENCER                           |
| 1   | COAT HOOK                          |
| 1   | GASKETING                          |
| 1   | UNISEX ACCESSIBLE TOILET ROOM SIGN |

|     |                      |
|-----|----------------------|
| 1.5 | PAIR BUTTS           |
| 1   | OFFICE LOCKSET (KEY) |
| 1   | CLOSER               |
| 2   | 10" KICK PLATE       |
| 1   | GASKETING            |

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